The Urgency of Equity

A Toolkit to Make Schools Safer for All from COVID-19

To advance slides, please use arrow keys, click, or swipe

Download a PDF of this toolkit

Sign on for toolkit

www.urgencyofequity.org
info@urgencyofequity.org
Last updated September 7, 2022

The #UrgencyofEquity Toolkit was developed by a coalition of public health experts and grassroots organizations to help educators, parents, youth leaders and communities advocate for safer, equitable schools, and separate fact from fiction about COVID-19 protections.

We will continue to update this toolkit as new science and information become available.

Urgency of Equity Toolkit Contents

Introduction

- The Urgency of Equity
- The UofE Fundamentals

Background

- Urgency of protecting each other
- COVID-19 can cause severe and chronic illness, disability, and death
- COVID-19 is airborne

Strategies for Safer Schools

- Using layers of protection
- Protecting Mental Health, Addressing Learning Loss, and Reimagining School as a Space for Discovery and Healing

Community Action

- Polling
- Organizing

Conclusion

Additional Resources

Introduction: The Urgency of Equity

The COVID-19 pandemic has not ended, but continues to inequitably impact communities. Amidst messaging that “the pandemic is over” and that “individual behaviors can protect everyone from the virus,” COVID-19 is still causing disproportionate harm to low-income, elderly, disabled and immunocompromised people, and in Indigenous, Black and/or Latinx communities.

No one can consider themselves immune to COVID-19’s impacts; every day young healthy adults and children die or are impacted by Long COVID in unpredictable patterns. The reality is this: COVID-19 is airborne, and we all breathe shared air. Protecting ourselves as individuals is insufficient.

Protecting each other is urgent.

Photo edited from @masktogetheramerica

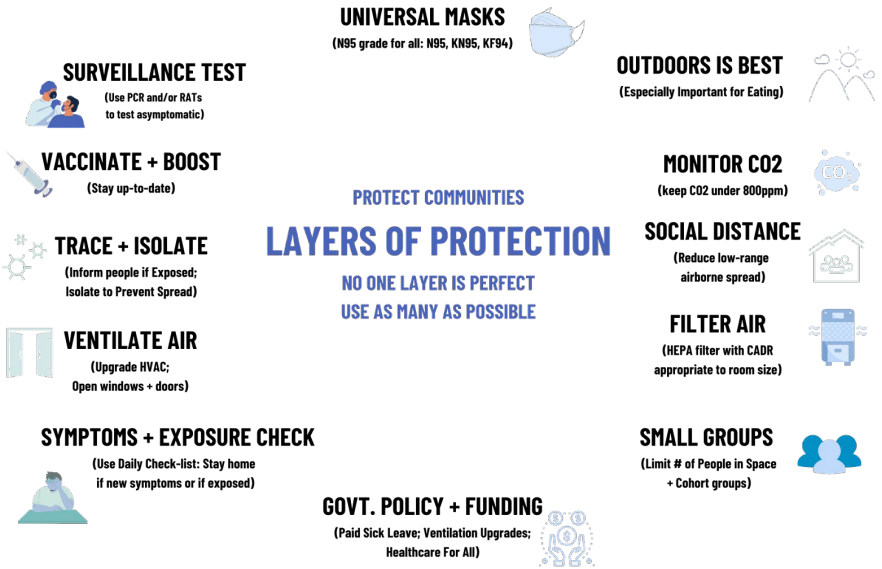
Source: https://www.science.org/doi/10.1126/sciadv.abm9128

Introduction: The Urgency of Equity

The evidence is clear: the best way to ensure the safety of students, teachers and staff and to keep schools open is to use ***multiple layers* of protection**.

Layers of protection include paid sick leave; mental health care for staff and students; coordinated ventilation and air cleaning efforts; sustained universal access to highly effective masks, testing, and updated vaccines; and proactive efforts to keep community viral levels low.

Achieving these protections requires consistent and vocal public support. It requires us to **organize our communities, to connect with one another and to make demands of our local, state, and federal governments.**


UNIVERSAL MASKS
(N95 grade for all: N95, KN95, KF94)
SURVEILLANCE TEST
(Use PCR and/or RATs to test asymptomatic)
OUTDOORS IS BEST
(Especially Important for Eating)
VACCINATE + BOOST
(Stay up-to-date)
MONITOR CO2
(keep CO2 under 800ppm)
PROTECT COMMUNITIES
LAYERS OF PROTECTION
NO ONE LAYER IS PERFECT
USE AS MANY AS POSSIBLE
TRACE + ISOLATE
(Inform people if Exposed; Isolate to Prevent Spread)
SOCIAL DISTANCE
(Reduce low-range airborne spread)
VENTILATE AIR
(Upgrade HVAC; Open windows + doors)
FILTER AIR
(HEPA filter with CADR appropriate to room size)
SYMPTOMS + EXPOSURE CHECK
(Use Daily Check-list: Stay home if new symptoms or if exposed)
SMALL GROUPS
(Limit # of People in Space + Cohort groups)
GOVT. POLICY + FUNDING
(Paid Sick Leave; Ventilation Upgrades; Healthcare For All)

Source: https://www.science.org/doi/10.1126/sciadv.abm9128

Introduction: The Urgency of Equity

More than two years into the pandemic, we have the knowledge and means to effectively reduce viral transmission and to keep our communities as safe as possible. Yet we've fallen far short.

We cannot accept a "normal" that includes continued, inequitable COVID-19 illness, disability, and death. Instead, we can and must keep schools and communities safe while establishing an ethical "normal": one that values the lives of our most vulnerable neighbors.

This toolkit provides accurate, up-to-date, substantiated information to help schools and communities make decisions that will keep ALL members of school communities safer. It recognizes that **collective, not individual**, approaches are necessary to protect our communities.

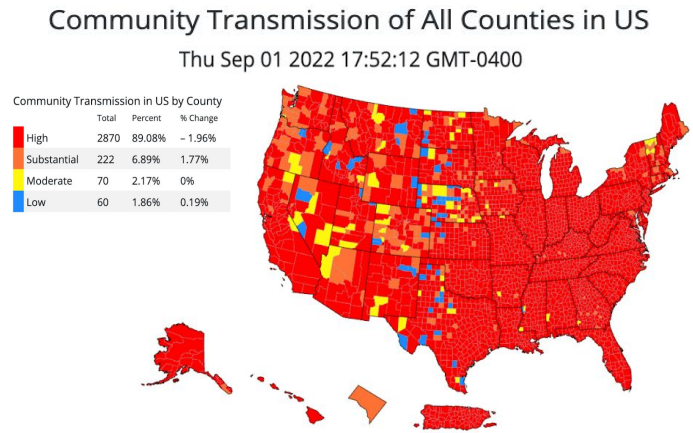
Source: https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(22)00071-2/fulltext

Introduction: Urgency of Equity Fundamentals

- We must urgently create a new normal in which commitment to community care drives policy and behavior. This charge requires sustained and collective action.
- COVID-19 can cause severe and chronic illness, disability, and death among educators, students, and families.
- COVID-19 is a disease caused by an airborne virus.
- Layers of protection including ventilation and air filtration, N95/KN95/KF94 grade masks, testing with corresponding data-driven isolation policies, and vaccination are essential tools to stopping the spread of COVID-19 and other respiratory pathogens which disrupt health and education.
- Reducing the spread and impact of COVID on children and their families — including caregiver losses and chronic illness — is an important part of protecting mental health.
- Learning loss caused by the pandemic can be mitigated when educators and schools have the right tools and resources. We must work to reimagine schools as spaces for discovery and healing.
- The U.S. public supports protections in schools and in the broader community.
- Organizing and centering youth voices is the key to safer schools.

Background:
Urgency of Protecting Each Other

We've Been in a Sustained COVID-19 Surge Since June 2022


Community Transmission of All Counties in US
Thu Sep 01 2022 17:52:12 GMT-0400
Community Transmission in US by County
Total
Percent
% Change
High 2870 89.08% – 1.96%
Substantial 222 6.89% 1.77%
Moderate 70 2.17% 0%
Low 60 1.86% 0.19%

- Most of the US population has been in areas of substantial or high COVID-19 transmission since early June, with over 96% of counties in areas of substantial or high transmission as of late August (per the CDC's own transmission map).

- Even the CDC's community levels map, which relies more so on lagging indicators (e.g., hospitalizations) versus the role of transmission itself, shows a large proportion of the country living under "high" community levels.

- The CDC's communication of risk via this community levels map has effectively eliminated much of the public's understanding of current COVID-19 transmission levels, which has made it more difficult for the public to determine their actual risk of infection.

- At the same time, with fewer people getting tested (due to a lack of federal funding for free testing sites) and those who *are* able to test often relying on at home tests (the results of which are often not reported), the *transmission map itself* is likely an *underestimate* of current transmission.

Sources: https://peoplescdc.org/2022/03/04/statement-report-on-us-cdc-covid-19-guidelines/; https://www.nytimes.com/2022/03/30/us/covid-vaccine-testing-states.html; https://www.pbs.org/newshour/health/growing-use-of-home-covid-19-tests-leaves-health-agencies-in-the-dark-about-unreported-cases; https://covid.cdc.gov/covid-data-tracker/?fbclid=IwAR1ma4AszmAQoap7onPARLcTnwM3Wsxo3RdskBnUpLlwzinRl585iM0IydA#county-view?list_select_state=all_states&list_select_county=all_counties&data-type=CommunityLevels&null=Risk

The CDC Warns of Millions of Infections in Fall 2022, While Removing Guidance on Protections

- The US administration has warned that 100 million infections are expected in the fall.
- Yet, on August 11 the CDC removed recommendations on asymptomatic testing, exposure isolation, and quarantine – all tools that protect against avoidable sickness, death, and chronic illness.

The Washington Post
Democracy Dies in Darkness

HEALTH

Coronavirus wave this fall could infect 100 million, administration warns

The projections for fall and winter are part of a pitch for additional funding for vaccines, treatments and tests

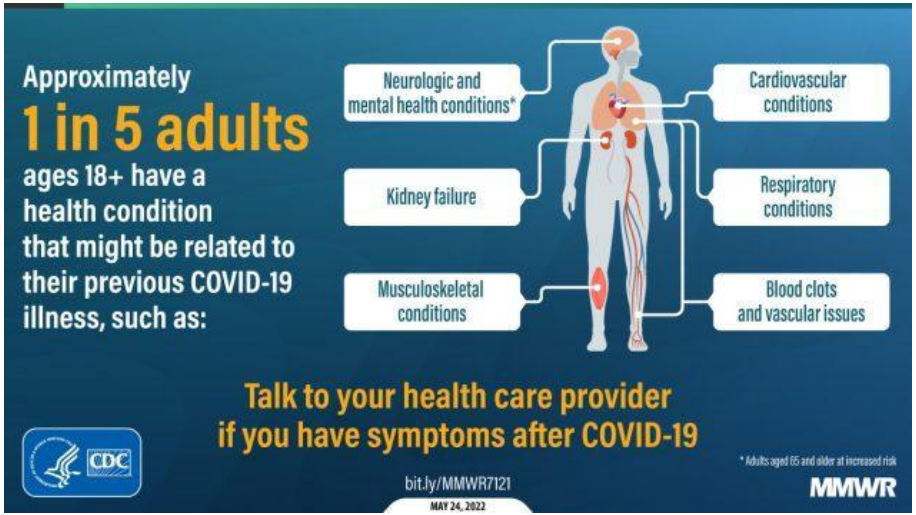
Sources: 1. https://www.usnews.com/news/health-news/articles/2022-07-08/how-many-people-have-long-covid-the-statistics-are-pretty-scary
2.https://www.cdc.gov/mmwr/volumes/71/wr/mm7121e1.htm?s_cid=mm7121e1_e&ACSTrackingID=USCDC_921-DM82414&ACSTrackingLabel=MMWR%20Early%20Release%20-%20Vol.%2071%2C%20May%2024%2C%202022&deliveryName=USCDC_921-DM82414#contribAff ; https://www.brookings.edu/research/new-data-shows-long-covid-is-keeping-as-many-as-4-million-people-out-of-work/

The Impacts of Long COVID Have Been Far Reaching With 26 Million Americans Directly Affected and 4 Million Unable to Work or Provide for Their Families

- Children are susceptible to long term impacts of COVID-19: A new report by the CDC itself shows children who have had COVID-19 are at increased risk for blood clots, heart problems, diabetes, and kidney failure.

- The chances of Long COVID and other adverse outcomes grows with reinfection. Numerous studies show multiple COVID-19 infections increase the risk of adverse outcomes, including death, hospitalization, lung, heart, GI, and kidney issues.

- The CDC reports 1 in 5 COVID-19 cases result in new, long term health issues.

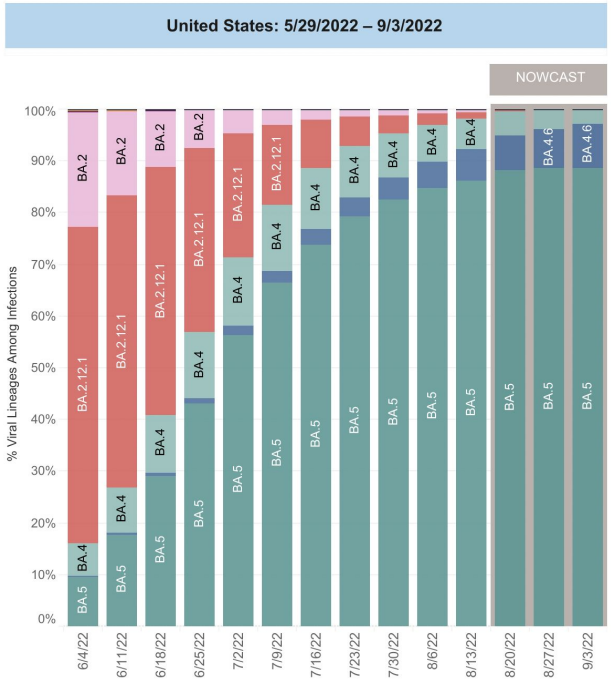

Approximately
1 in 5 adults
ages 18+ have a health condition that might be related to their previous COVID-19 illness, such as:
Neurologic and mental health conditions*
Kidney failure
Musculoskeletal conditions
Cardiovascular conditions
Respiratory conditions
Blood clots and vascular issues
Talk to your health care provider if you have symptoms after COVID-19
CDC
bit.ly/MMWR7121
MAY 24, 2022
* Adults aged 65 and older at increased risk
MMWR

Journal of Medicine

Sources: 1. https://www.researchsquare.com/article/rs-1749502/v1 2. https://www.nejm.org/doi/full/10.1056/NEJMc2206576 3. https://pascdashboard.aapmr.org/
4. https://www.researchsquare.com/article/rs-1749502/v1 5. https://www.webmd.com/lung/news/20220707/each-covid-19-reinfection-increases-health-risks
6. https://pascdashboard.aapmr.org/ 7. https://www.bmj.com/content/374/bmj.n1648
8. https://www.brookings.edu/research/new-data-shows-long-covid-is-keeping-as-many-as-4-million-people-out-of-work/

Uncontrolled Viral Spread Due to Lack of Protections Has Contributed to COVID Variants That are Increasingly Resistant to Vaccines and Prior Infection

- BA.5, the dominant variant at present in the US, is the most infectious variant to date. It is also able to evade immunity from vaccines and past infections, leading to increased risk of reinfection. This may hopefully be alleviated by the introduction of a new bivalent booster in the fall. However, this will not be available to children under 12 years old.
- Risk of reinfection with the Omicron variant is 5.4 times greater than that of the Delta variant. Studies have shown that vaccine effectiveness decreased in preventing moderate to severe disease against BA2.12.
- Unchecked spread allows COVID to continue to evolve. New variants could be more or less contagious, or cause more or less severe disease.



Sources: 1. https://www.cnn.com/2022/07/13/world/coronavirus-newsletter-intl-07-13-22/index.html; 2. https://erictopol.substack.com/p/ba5-chapter-2; 3. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4054457; 4. https://www.cdc.gov/mmwr/volumes/71/wr/mm7129e1.htm?s_cid=mm7129e1_w 5. https://nextstrain.org/ncov/gisaid/global/6m?l=radial

Pediatric Hospitalizations are on the Rise

- ~14.2 million children were reported testing positive for COVID-19 since the onset of the pandemic based on available state reports (CDC); ~6.3 million of those reported cases (44%) occurred in 2022
- More than 80,000 children were hospitalized with COVID-19 during the 2021-2022 school year. Since August 2020, over 150,000 children have been hospitalized for COVID-19.
- Pediatric hospitalizations were highest mid-January 2022, remain high, and as of August 22, the 7-day average number of children being admitted to the hospital with confirmed COVID-19 is 288.

Sources: 1. https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions; 2. https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions
3. https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-11-2-3/03-Covid-Jefferson-508.pdf
4. https://covid.cdc.gov/covid-data-tracker/#cases_community; 5. https://covid.cdc.gov/covid-data-tracker/#demographicsovertime;
6. https://www.kff.org/coronavirus-covid-19/issue-brief/low-income-and-communities-of-color-at-higher-risk-of-serious-illness-if-infected-with-coronavirus/

Background:

COVID-19 Can Cause Severe and Chronic Illness, Disability, and Death

COVID-19 is Deadly

- COVID-19 was the 4th leading cause of death for children ages 5-14 in January 2022.
- As of August 13, 2022, 1.3% of deaths among children in the United States ages 0-17 were due to COVID-19.

Top 5 leading causes of death in the U.S. *(number of deaths in the month)*, by age, January 2022

Rank	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
1	Accidents *(130)*	Accidents *(1,260)*	Accidents *(2,610)*	Accidents *(2,588)*	**COVID-19** *(5,099)*	**COVID-19** *(11,904)*	**COVID-19** *(18,292)*	**COVID-19** *(20,707)*	Heart disease *(20,004)*
2	Cancer *(64)*	Homicide *(539)*	**COVID-19** *(851)*	**COVID-19** *(1,994)*	Cancer *(2,772)*	Cancer *(8,898)*	Cancer *(14,557)*	Heart disease *(13,738)*	**COVID-19** *(19,499)*
3	Suicide *(50)*	Suicide *(505)*	Suicide *(704)*	Heart disease *(1,009)*	Heart disease *(2,772)*	Heart disease *(7,261)*	Heart disease *(11,396)*	Cancer *(13,324)*	Cancer *(8,313)*
4	**COVID-19** *(39)*	**COVID-19** *(202)*	Homicide *(594)*	Cancer *(900)*	Accidents *(2,318)*	Accidents *(2,410)*	Chronic respiratory *(3,002)*	Chronic respiratory *(3,696)*	Alzheimer disease *(6,178)*
5	Homicide *(38)*	Cancer *(106)*	Heart disease *(320)*	Suicide *(610)*	Liver disease *(792)*	Diabetes *(1,529)*	Stroke *(2,317)*	Stroke *(3,629)*	Stroke *(5,458)*

Note: COVID-19 ranked as the #2 cause of death across all age groups in January 2022.

Source: KFF analysis of CDC data • Get the data • PNG

Peterson-KFF Health System Tracker

Sources:1. https://data.cdc.gov/NCHS/Provisional-COVID-19-Deaths-by-Sex-and-Age/9bhg-hcku/data
2.https://www.healthsystemtracker.org/brief/covid-19-leading-cause-of-death-ranking/#Average%20daily%20deaths%20in%20the%20United%20States,%20by%20cause%20(March%202020%20-%20February%202022)%C2%A0%C2%A0

COVID-19 is Deadlier for Children Than Other Diseases We Already Vaccinate Against

- Pre-vaccination, COVID-19 is more deadly than Hepatitis A, Meningococcus, Varicella, Rubella, Rotavirus, all of which students are required to be vaccinated against in most US school systems.

Pediatric vaccine preventable diseases: Deaths per year in the United States prior to recommended vaccines

	Hepatitis A[1]	Meningococcal (ACWY)[2]	Varicella[3]	Rubella[4]	Rotavirus[5]	COVID-19[6]
Age	**<20 years**	**11–18 years**	**5–9 years**	**All ages**	**<5 years**	**6 months – 4 years**
Time period	1990–1995	2000–2004	1990–1994	1966–1968	1985–1991	Jan 2020–May 2022
Average deaths per year	**3**	**8**	**16**	**17**	**20**	**86**

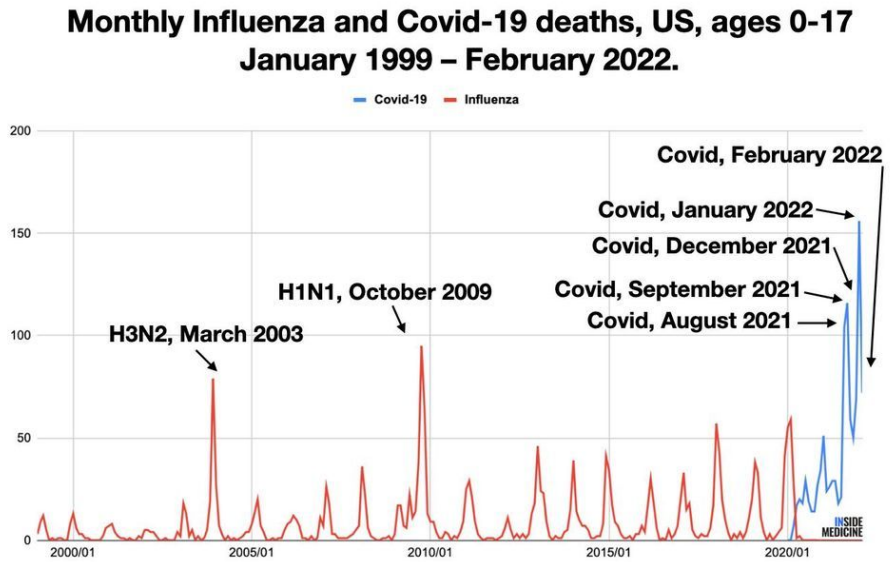
[1]Vogt TM , Wise ME, Bell BP, Finelli L. Declining hepatitis A mortality in the United States during the era of hepatitis A vaccination. J Infect Dis2008; 197:1282–8.
[2]National Notifiable Diseases Surveillance System with additional serogroup and outcome data from Enhanced Meningococcal Disease Surveillance for 2015-2019.
[3]Meyer PA, Seward JF, Jumaan AO, Wharton M. Varicella mortality: trends before vaccine licensure in the United States, 1970-1994. J Infect Dis. 2000;182(2):383-390. doi:10.1086/315714
[4]Roush SW , Murphy TV; Historical comparisons of morbidity and mortality for vaccine-preventable diseases in the United States. JAMA 2007; 298:2155–63.
[5] Glass RI, Kilgore PE, Holman RC, et al. The epidemiology of rotavirus diarrhea in the United States: surveillance and estimates of disease burden. J Infect Dis. 1996 Sep;174 Suppl 1:S5-11.
[6] https://data.cdc.gov/NCHS/Provisional-COVID-19-Deaths-Counts-by-Age-in-Years/3apk-4u4f/data. Accessed May 14, 2022

Source: https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2022-06-17-18/02-COVID-Fleming-Dutra-508.pdf

COVID-19 is Far More Serious For Children Than the Flu

- **Over the course of the pandemic, more than 1422 children under 18 have died from COVID-19 in the US.**

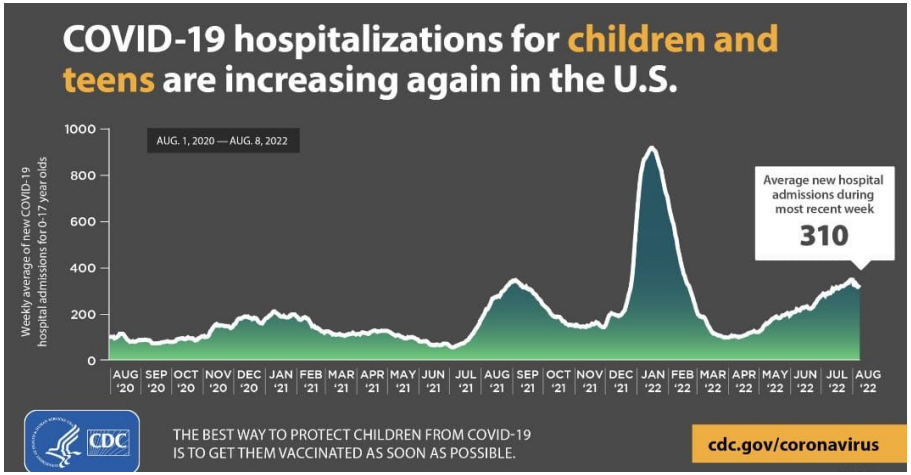
- In the same time frame, fewer than 10 flu-related childhood deaths have been reported.*
  - In the US, fewer than 200 children die from the flu each year, with the record being 199 in 2019-2020.
  - Less than 50 flu deaths have been reported so far in 2021-22



Sources: 1. https://data.cdc.gov/NCHS/Provisional-COVID-19-Deaths-Focus-on-Ages-0-18-Yea/nr4s-juj3;
2. https://www.bloomberg.com/news/newsletters/2022-06-03/coronavirus-daily-covid-is-more-lethal-to-kids-than-the-flu;
3. https://publications.aap.org/pediatrics/article/148/6/e2021053760/183446/COVID-19-Associated-Orphanhood-and-Caregiver-Death;
4. https://www.cdc.gov/flu/weekly/weeklyarchives2020-2021/PedFlu05.html; https://covid.cdc.gov/covid-data-tracker/#demographics

Children Who Have Had COVID-19 are at Greater Risk for New Chronic Illness

- Pediatric hospitalizations were at the highest point of the entire pandemic in mid-January 2022, remain high, and as of August 8th, the 7-day average number of children being admitted to the hospital with confirmed COVID-19 is 310.
- A new report by the CDC itself shows children who have had COVID-19 are at increased risk for blood clots, heart problems, diabetes, and kidney failure.


COVID-19 hospitalizations for children and teens are increasing again in the U.S.
AUG. 1, 2020 — AUG. 8, 2022
Weekly average of new COVID-19 hospital admissions for 0-17 year olds
1000
800
600
400
200
0
Average new hospital admissions during most recent week
310
AUG '20 SEP '20 OCT '20 NOV '20 DEC '20 JAN '21 FEB '21 MAR '21 APR '21 MAY '21 JUN '21 JUL '21 AUG '21 SEP '21 OCT '21 NOV '21 DEC '21 JAN '22 FEB '22 MAR '22 APR '22 MAY '22 JUN '22 JUL '22 AUG '22
CDC
THE BEST WAY TO PROTECT CHILDREN FROM COVID-19 IS TO GET THEM VACCINATED AS SOON AS POSSIBLE.
cdc.gov/coronavirus

Sources: 1. https://twitter.com/CDCgov/status/1558169205341560832?t=G98TJ7r6QzGF4OuoGWq7GQ&s=19

Pediatric Hospitalizations Impact Certain Communities More Than Others

- More than 1 in 4 children hospitalized for COVID-19 or multisystem inflammatory syndrome in children (MIS-C) due to COVID-19 have persistent symptoms 2 to 4 months later.
- Throughout the pandemic, **hospitalizations and deaths have been highest in low-income, Indigenous, Black, and/or Latinx communities.** By August 2021, 68% of children ages 5-11 hospitalized with COVID-19 were Black or Hispanic.

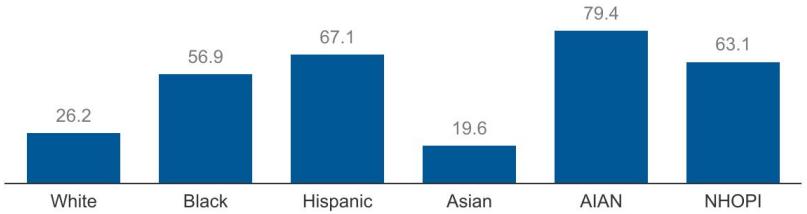
Figure 1

COVID-19 Hospitalization Rates Among Children by Race/Ethnicity, August 31, 2021

Total hospitalizations among children ages 0 to 19 per 10,000 population

Click on the buttons below to see data for the different metrics:

Cases | Hospitalizations | Deaths



NOTE: Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic. AIAN refers to American Indian and Alaska Native. NHOPI refers to Native Hawaiian and Other Pacific Islander.

SOURCE: Cases, hospitalization and deaths data based on KFF analysis of Centers for Disease Control and Prevention, COVID-19 Response. COVID-19 Case Surveillance Data Access, Summary, and Limitations (version date: August 31, 2021). The CDC does not take responsibility for the scientific validity or accuracy of methodology, results, statistical analyses, or conclusions presented. Total population data used to calculate rates based on KFF analysis of 2019 American Community Survey data.

KFF

Sources:

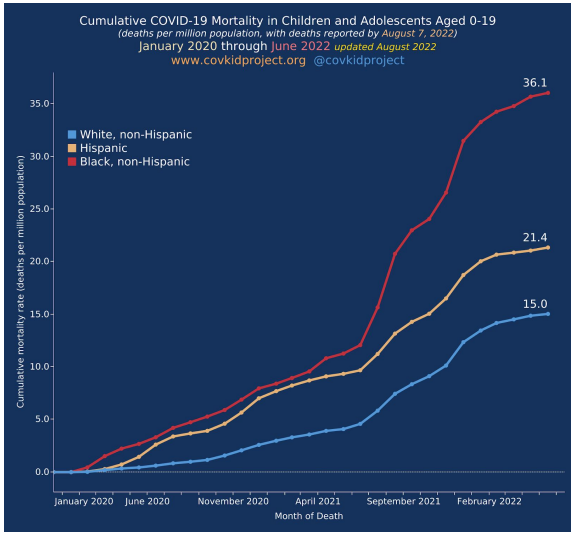
1. https://publications.aap.org/pediatrics/article/doi/10.1542/peds.2022-057798/188356/Health-Impairments-in-Children-and-Adolescents?searchresult=1
2. https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-11-2-3/03-Covid-Jefferson-508.pdf
3. https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-in-covid-19-impacts-and-vaccinations-for-children/
4. https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-11-2-3/03-Covid-Jefferson-508.pdf

COVID-19 Deaths Have Disproportionately Impacted Black, Latinx and Indigenous people

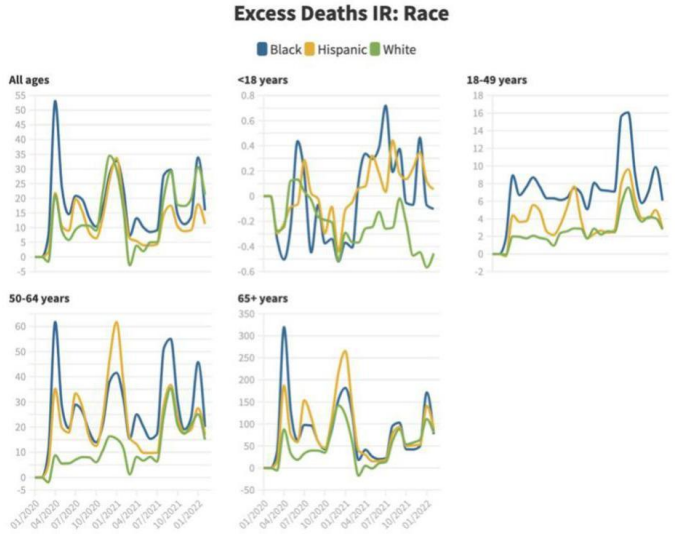
- Although COVID-19 cases and deaths are undercounted due to the dismantling of testing infrastructure, and changes in what is defined as a COVID death, preliminary data is stark.

- Since the start of the pandemic, (1) cumulative mortality rates in children and (2) excess deaths in children under 18 have concentrated predominantly in Black and Latinx people.

1.



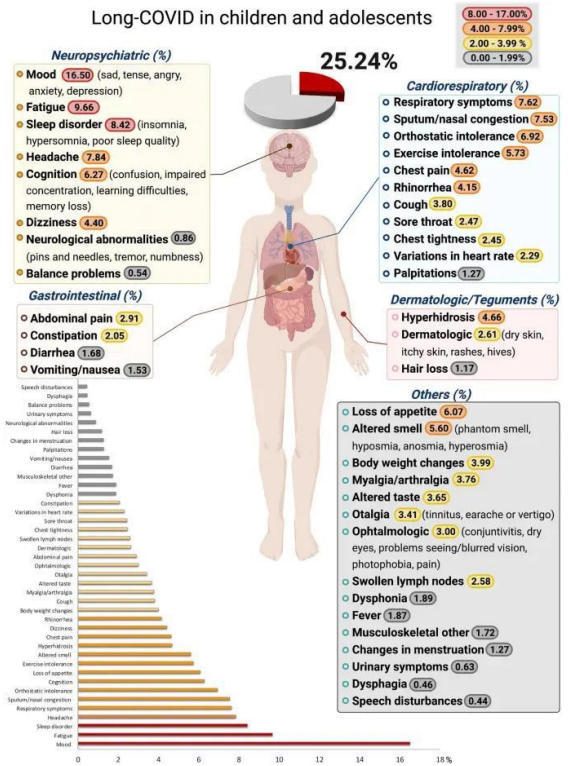
2.



Sources: 1. https://www.covkidproject.org/deaths 2. https://www.medrxiv.org/content/10.1101/2022.08.16.22278800v1.full

Children Can Develop Long COVID

- A recent meta analysis estimated that 25% of children and adolescents who get COVID-19 develop Long COVID (with a 95% confidence interval of 18%-33%).
- Kids who have had COVID-19 are about twice as likely to develop rare health problems like blood clots, heart and kidney problems compared to those who have never been infected.
- Long COVID sufferers experience a wide range of symptoms and conditions after COVID-19 infection, often after mild or fully asymptomatic infections. Multiple organs can be affected, including the brain, kidneys, lungs, and heart.



Sources: 1. https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/ 2. https://www.cdc.gov/mmwr/volumes/71/wr/mm7131a3.htm
3. https://www.nature.com/articles/s41591-022-01689-3 4. https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2778090
5. https://bmcnephrol.biomedcentral.com/articles/10.1186/s12882-021-02389-9 6. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8469288/
7. https://www.nature.com/articles/s41598-022-13495-5

Long COVID Can Have Serious Effects on Children's Health & Learning

- Symptoms and disability can impact children's everyday life, often making it difficult to attend school or participate in extracurricular activities. Long COVID cognitive symptoms include "brain fog" presented as memory impairment, difficulty with attention, planning, focusing, and multitasking. These can also impact the students' as they can become frustrated, anxious or depressed because of the changes in their cognitive abilities.
- Long COVID is recognized federally (Section 504 and IDEA), with guidance on how schools should support students with Long COVID.
- Preventing Long COVID by reducing COVID-19 infections is important for students' learning and current and long-term health.
- In children, the psychological symptoms of Long COVID might be misinterpreted as behavior problems. Because of structural racism and ableism, this perception will negatively impact Black, Indigenous, disabled, and students of color.

Sources: 1. https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Post-COVID-Conditions-in-Children-and-Teens.aspx
2. https://www.health.harvard.edu/blog/brain-fog-memory-and-attention-after-covid-19-202203172707 3. https://sites.ed.gov/idea/files/ocr-factsheet-504-20210726.pdf
4. https://www.tandfonline.com/doi/abs/10.1080/02796015.2011.12087730 5. https://www.theatlantic.com/education/archive/2015/07/school-discipline-children-disabilities/399563/
6. https://www.washingtonpost.com/health/2021/10/03/long-haul-covid-kids-schools/ 7. https://www.nytimes.com/2021/08/08/health/long-covid-kids.html

Teachers and School Staff Can Also Develop Long COVID

- Children are not the only ones at risk in schools. Teachers and school staff can also develop Long COVID. The CDC reports that 1 in 5 adults suffer from Long COVID.
- Vaccination does not completely protect against Long COVID: a recent study out of the UK showed that "among triple-vaccinated adults, the prevalence of Long Covid was 8.5% for Delta and 8.0% for Omicron BA.1." This means 1 in 12 triple-vaxxed patients who get COVID-19 could develop Long COVID.
- Preventing infections is the best way to keep teachers & students healthier for the long term, if not, our talented teaching staff will continue to leave the workforce.

tes magazine

Teaching & Learning Scotland Leadership More from Tes

Long Covid rising fastest in teaching and education staff

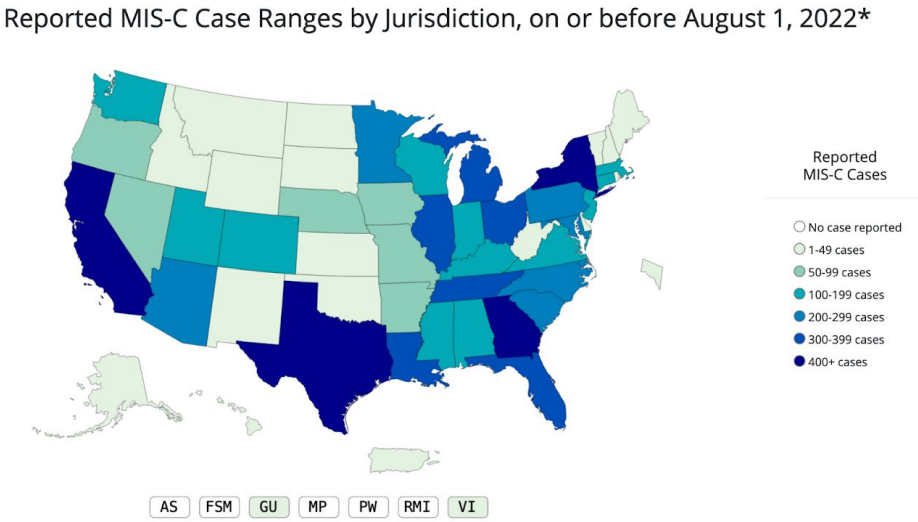
Education staff now have the second highest incidence of long Covid, above healthcare workers, new data shows

6th January 2022, 4:05pm

Sources:
1. https://www.tes.com/magazine/news/general/long-covid-rising-fastest-teaching-and-education-staff 2.https://www.cdc.gov/mmwr/volumes/71/wr/mm7121e1.htm
3. https://www.nature.com/articles/s41591-022-01840-0 4. https://www.researchsquare.com/article/rs-1749502/v1
5.https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/selfreportedlongcovidafterinfectionwiththeomicronvariant/6may2022

Multisystem Inflammatory Syndrome (MIS-C) is a Serious Consequence of COVID-19 for Many Children

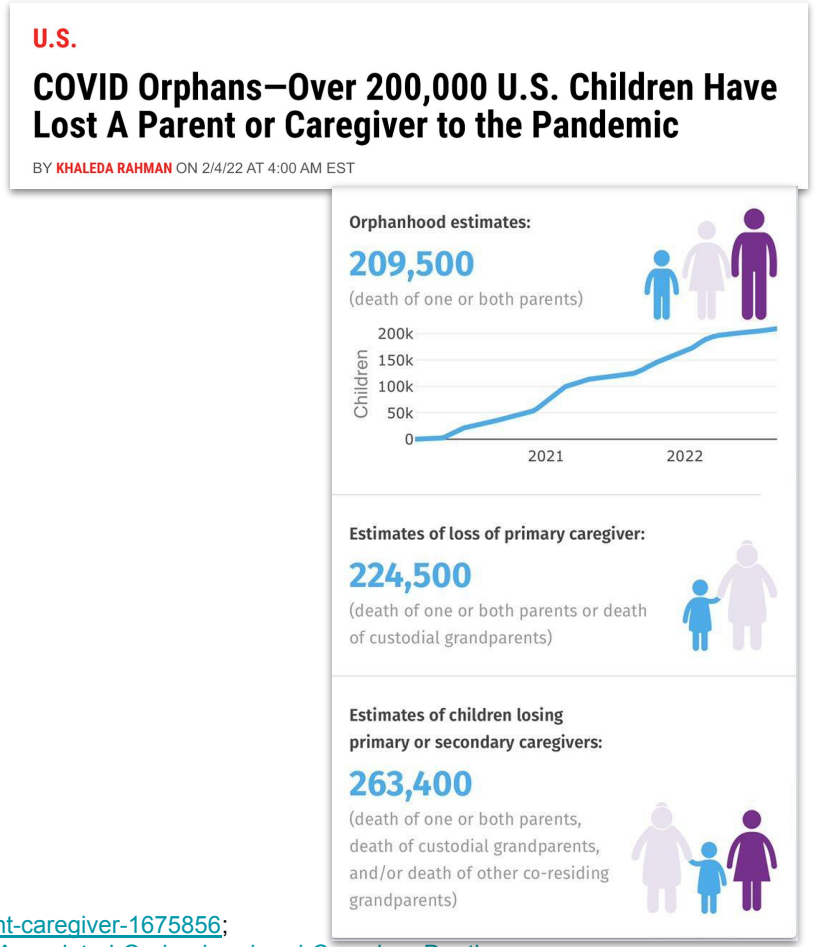
- MIS-C is a rare but serious condition that appears in some school-aged children 2 to 6 weeks after a COVID-19 infection.
- A total of 6,851 MIS-C cases and 59 MIS-C Deaths (meeting case definition) have been reported as of January 31, 2022.
- Unlike Long COVID, there is strong evidence that vaccination prevents MIS-C.
- MIS-C has been less of a concern with Omicron, but we do not know what risks the next variant might hold.



Sources: 1. https://covid.cdc.gov/covid-data-tracker/#mis-national-surveillance;
2. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2780861;
3. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787258; 4. https://www.cdc.gov/mmwr/volumes/71/wr/mm7102e1.htm

Hundreds of Thousands of Children Have Lost a Caregiver to COVID-19

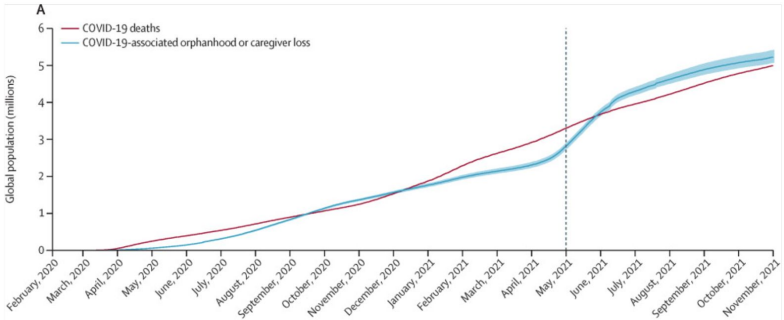
- Healthy schools mean fewer children bringing the virus home to their families, where it can spread to vulnerable family members, including grandparents and younger siblings.
- Over 200,000 US Children have lost a parent or Caregiver to the Pandemic, causing emotional stress, poor mental health, and severe disruptions to learning.
- The risk of caregiver loss was 1.1 to 4.5 times higher among Black and Latinx children. Even more students have had a caregiver hospitalized or suffering from Long COVID.
- Almost **450** **teachers have died** from COVID-19.


U.S.
COVID Orphans—Over 200,000 U.S. Children Have Lost A Parent or Caregiver to the Pandemic
BY KHALEDA RAHMAN ON 2/4/22 AT 4:00 AM EST
Orphanhood estimates:
209,500
(death of one or both parents)
Children
200k
150k
100k
50k
0
2021
2022
Estimates of loss of primary caregiver:
224,500
(death of one or both parents or death of custodial grandparents)
Estimates of children losing primary or secondary caregivers:
263,400
(death of one or both parents, death of custodial grandparents, and/or death of other co-residing grandparents)

Sources: 1. https://www.newsweek.com/covid-orphans-over-200000-children-lost-parent-caregiver-1675856;
2. https://publications.aap.org/pediatrics/article/148/6/e2021053760/183446/COVID-19-Associated-Orphanhood-and-Caregiver-Death
3. https://www.edweek.org/teaching-learning/educators-weve-lost-to-the-coronavirus/2020/04#2021
4. https://imperialcollegelondon.github.io/orphanhood_calculator/

Global Caregiver Deaths are Stark

- At a global level it is estimated that more than 3 million children have suffered the death of a primary caregiver.
- More than 10 million have suffered the loss of a primary or secondary caregiver.
- Caregiver deaths are specially impactful and widespread in India, South Africa, and Latin American countries, with orphanhood rates as high as 2-8 children per 1000.



SCIENCE | CORONAVIRUS COVERAGE

COVID-19's hidden, heartbreaking toll: millions of orphaned children

An estimated 10.4 million children have lost a parent or caregiver, putting them at higher risk for poverty and every major cause of death—but it doesn't have to end in catastrophe.

Source: 2. https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(22)00005-0;
2. https://www.nationalgeographic.com/science/article/covid-19-hidden-heartbreaking-toll-millions-of-orphaned-children
3. https://imperialcollegelondon.github.io/orphanhood_calculator/#/country/United%20States%20of%20America

COVID-19 Has Devastating Impacts on Children's Mental Health, Particularly for Those Who Have Lost Caregivers

- A study using data up to April 2021 estimated that globally, 1,134,000 children lost a primary caregiver (at least one parent or *custodial* grandparent), and 1,562,000 children lost at least one primary or secondary caregiver.
- Currently over 200,000 children in the U.S. have lost a primary caregiver. **BIPOC youth have disproportionately lost caregivers:** The risk of loss was 1.1 to 4.5 times higher among racially and ethnically minoritized youth, and 2.4 and 4.5 times higher among Black and Indigenous youth, respectively.
- 35% of family members of patients who had ICU-level acute respiratory distress experienced PTSD-related symptoms 90 days later.

"The part that I keep going back to is likely the best way to protect our kids' mental health is to have less people dying by COVID."

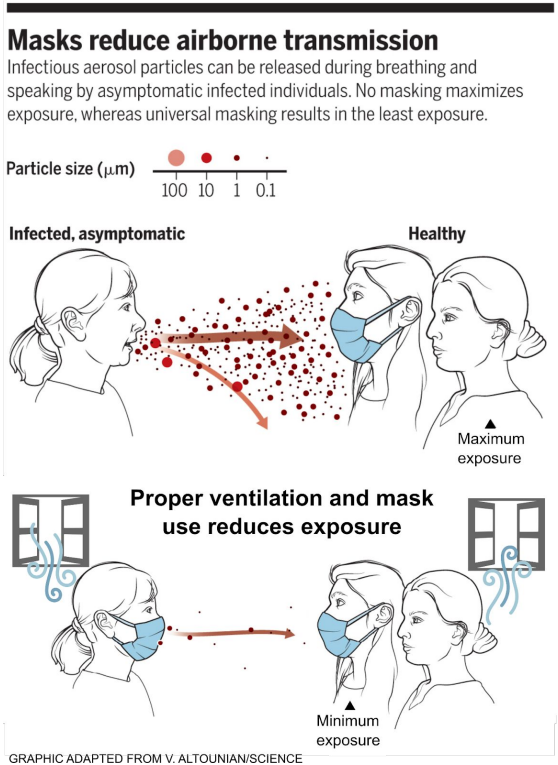
- Dr. Tyler Black, ER Mental Health Physician & Researcher

Sources: 1. Lancet. 2021 Jul 31;398(10298):391-402. doi: 10.1016/S0140-6736(21)01253-8. Epub 2021 Jul 21. 2. JAMA. 2022 Feb 18 (published online) doi: 10.1001/jama.2022.2017; 3. https://publications.aap.org/pediatrics/article/148/6/e2021053760/183446/COVID-19-Associated-Orphanhood-and-Caregiver-Death; 4. https://www.newsweek.com/covid-orphans-over-200000-children-lost-parent-caregiver-1675856

Background:
COVID-19 is Caused by an Airborne Virus

COVID is Airborne - It Spreads Through the Air We Breathe

- Public health guidance early in the pandemic emphasized that COVID-19 spread through droplets, and de-emphazised the extent to which it spread by airborne transmission. This caused us to focus on six-feet of social distancing instead of cleaning and regulating indoor air and mask use.
- Airborne transmission means that individuals are primarily infected through inhaling aerosols containing the virus. Aerosols are produced when an infected person exhales, speaks, shouts, sings, sneezes, or coughs.
- A cough or sneeze can propel viral particles up to **12 feet**. Even exhaled aerosols can fill indoor spaces rapidly and be recirculated by ventilation systems. Laboratory experiments suggest that the exhaled infectious virus can remain suspended in the air for prolonged periods of time.*
- Cleaning indoor air is essential to reducing COVID-19's spread, and masks reduce the amount of virus in the air.


Masks reduce airborne transmission
Infectious aerosol particles can be released during breathing and speaking by asymptomatic infected individuals. No masking maximizes exposure, whereas universal masking results in the least exposure.
Particle size (μm)
100 10 1 0.1
Infected, asymptomatic
Healthy
Maximum exposure
Proper ventilation and mask use reduces exposure
Minimum exposure
GRAPHIC ADAPTED FROM V. ALTOUNIAN/SCIENCE

*The data regarding how long the virus can stay infectious in the air is mixed, ranging from 20 minutes to up to 3 hours.

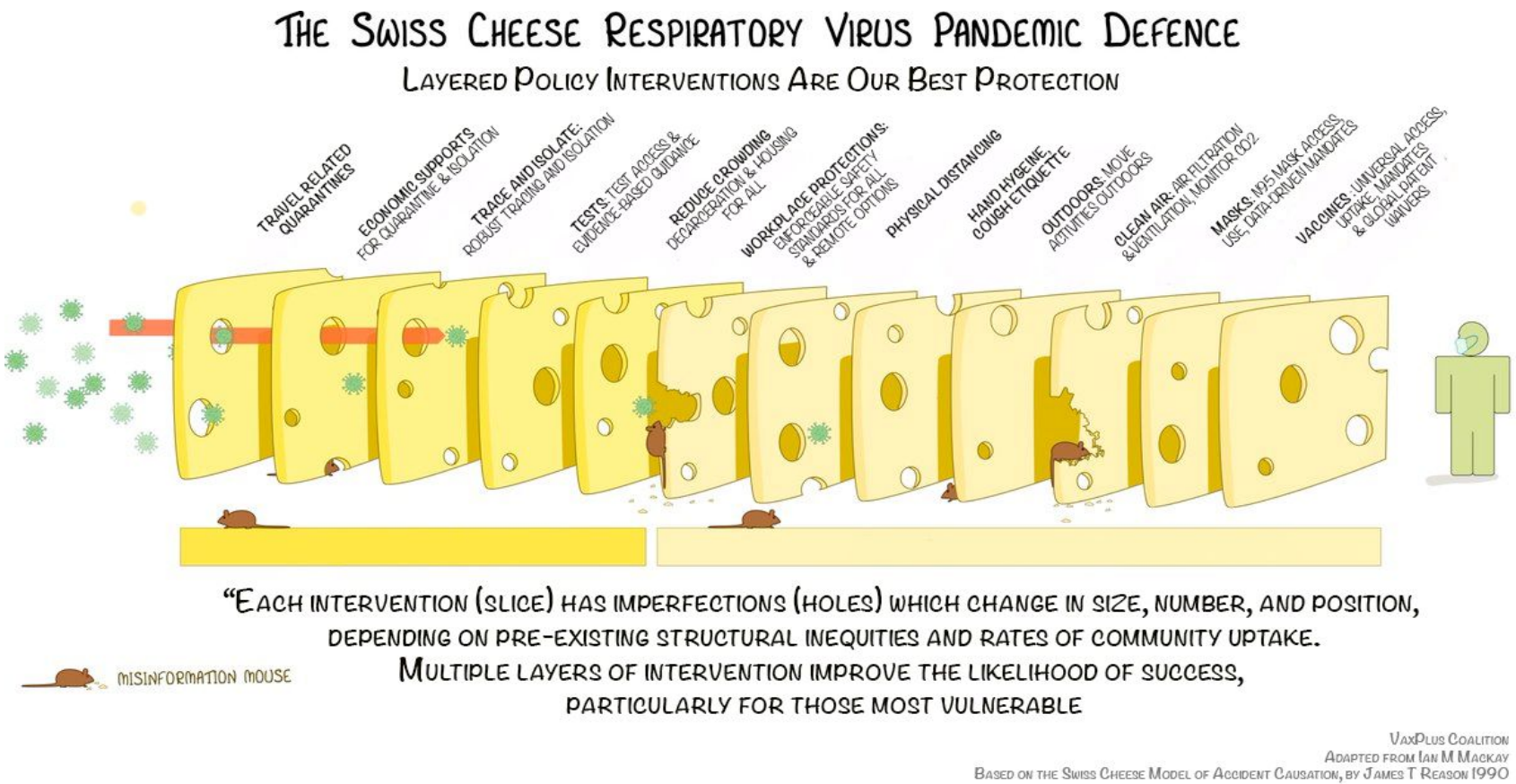
Sources: https://www.thelancet.com/article/S0140-6736(21)00869-2/fulltext; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7707926/pdf/jkms-35-e415.pdf; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7121658/pdf/NEJMc2004973.pdf; https://www.medrxiv.org/content/10.1101/2022.01.08.22268944v1.full.pdf; https://www.tandfonline.com/doi/epub/10.1080/22221751.2020.1777906; https://www.science.org/doi/10.1126/science.abd9149 ; https://www.science.org/doi/10.1126/science.abc6197

Strategies for Safer Schools: **Using layers of protection**

COVID-19 is Airborne: Multiple Layers of Protection Keep Schools Safer

- **Keeping community transmission low** will keep schools safer for all students and staff.
- **Improve ventilation and HEPA air filtration** in schools. Monitor indoor air with CO2 monitors, aiming for as close as possible to outdoor air (400ppm is ideal, 800ppm should be absolute max). Use portable HEPA filters, and when that is not possible, Corsi-Rosenthal boxes.
- Provide and encourage correct wearing of **high-quality masks** (N95/KF94/KN95) for all students, teachers, and staff. Masks should cover the nose and mouth and be without gaps around the sides, nose, and chin for optimal protection.
- Use **universal, at-least weekly surveillance testing, ideally PCR** for students, teachers, and school staff. When individuals are experiencing symptoms or test positive, stay home for the full ten-day isolation period. For those who want to or have to exit isolation early, negative rapid tests on two consecutive days* (no earlier than day 5) should be used to guide their decision making. **Advocate for federally-funded free testing in all schools.**
- **Increase vaccination rates** among students, staff, and teachers; encourage everyone to get their COVID-19 vaccinations and boosters as advised by the CDC.

Sources: See the updated guidance from the American Academy of Pediatrics which encourages masking and vaccination, for more details: https://publications.aap.org/aapnews/news/19512/AAP-updates-pandemic-guidance-on-school-sports and https://www.uchicagomedicine.org/forefront/coronavirus-disease-covid-19/early-data-suggests-many-individuals-still-covid-positive on the insufficiency of 5 day quarantine. NOTE: *Please note: treatment with Paxlovid may lead to COVID rebound after initial negative tests. Continue surveillance testing / masking.


THE SWISS CHEESE RESPIRATORY VIRUS PANDEMIC DEFENCE
LAYERED POLICY INTERVENTIONS ARE OUR BEST PROTECTION
TRAVEL RELATED QUARANTINES
ECONOMIC SUPPORTS FOR QUARANTINE & ISOLATION
TRACE AND ISOLATE: ROBUST TRACING AND ISOLATION
TESTS: TEST ACCESS & EVIDENCE-BASED GUIDANCE
REDUCE CROWDING: DECARCERATION & HOUSING FOR ALL
WORKPLACE PROTECTIONS: ENFORCEABLE SAFETY STANDARDS FOR ALL & REMOTE OPTIONS
PHYSICAL DISTANCING
HAND HYGEINE, COUGH ETIQUETTE
OUTDOORS: MOVE ACTIVITIES OUTDOORS
CLEAN AIR: AIR FILTRATION & VENTILATION, MONITOR CO2
MASKS: N95 MASK ACCESS, USE, DATA-DRIVEN MANDATES
VACCINES: UNIVERSAL ACCESS, UPTAKE, MANDATES & GLOBAL PATENT WAIVERS
"EACH INTERVENTION (SLICE) HAS IMPERFECTIONS (HOLES) WHICH CHANGE IN SIZE, NUMBER, AND POSITION, DEPENDING ON PRE-EXISTING STRUCTURAL INEQUITIES AND RATES OF COMMUNITY UPTAKE.
MULTIPLE LAYERS OF INTERVENTION IMPROVE THE LIKELIHOOD OF SUCCESS, PARTICULARLY FOR THOSE MOST VULNERABLE
MISINFORMATION MOUSE
VAXPLUS COALITION
ADAPTED FROM IAN M MACKAY
BASED ON THE SWISS CHEESE MODEL OF ACCIDENT CAUSATION, BY JAMES T REASON 1990

Adapted from: https://twitter.com/MackayIM/status/1434033705312415747/photo/1

Case Study: Abrome Ed

Risk Level	Average new cases	Positivity rate
Low	< 2 / 100,000	< 3%
Medium	≥ 2 / 100,000	≥ 3 %
High	≥ 10 / 100,000	≥ 10 %
Very High	≥ 25 / 100,000	≥ 20 %
Extremely High	≥ 75 / 100,000	≥ 33 %

This Austin, Texas school's commitment to community care has led to the adoption of rigorous protections which have prevented in-school transmission for two years. While other schools may not be able to implement all of the layers of protections that Abrome has, we offer their 2022-2033 COVID-19 policy guidelines as a reference for anyone working towards gold-standard policy advocacy.

Abrome Covid-19 Risk-based guidelines

Risk Level	Where we gather	Masking (KF94, KN95, N95 or better)	Covid testing (Surveillance LAMP testing)	Other notes
Low	**Indoors** Up to 60 people	Yes	Daily	Must eat food outdoors with 3' of spacing
	Outdoors Everyone else	No	Daily	Must eat food with 3' of spacing
Medium	**Indoors** Up to 45 people	Yes	Daily	Must eat food outdoors with 3' of spacing
	Outdoors Everyone else	Yes	Daily	Must eat food with 3' spacing
High	**Indoors** Up to 34 people Cell sizes limited to 20 people	Yes	Daily	Must eat food outdoors with 6' of spacing Maintain 3' of distancing indoors
	Outdoors Everyone else	Yes	Daily	Must eat food with 6' spacing Masking only required when within 3' of others
Very High	**Indoors** Up to 22 people Cell sizes limited to 15 people	Yes	Daily	Must eat food outdoors with 6' of spacing Maintain 6' of distancing indoors
	Outdoors Everyone else	Yes	Daily	Must eat food with 6' spacing Masking only required when within 6' of others
Extremely High	**Outdoors** Everyone When hospital capacity is not at risk of being overwhelmed	Yes	Daily	Must eat food with 6' spacing Masking only required when within 6' of others
	Remote Everyone When hospital capacity is at risk of being overwhelmed	n/a	n/a	

* Case rates are calculated per week

Layers of Protection:
Improving Indoor Air Ventilation and Filtration With HEPA Filters Makes Schools Safer

Since COVID-19 is Airborne, Improving Indoor Air Ventilation and Cleaning Indoor Air Using HEPA Filtration Makes Schools Safer

Ventilation can help in two ways: diluting the virus with **fresh air flowing** through the room and filtering the air.

- Use Portable Air Cleaners with **HEPA-filters** (air purifiers) in every classroom, with a Clean Air Delivery Rate (CADR) appropriate to the room size. Aim for at least six (6) Air Changes per Hour.

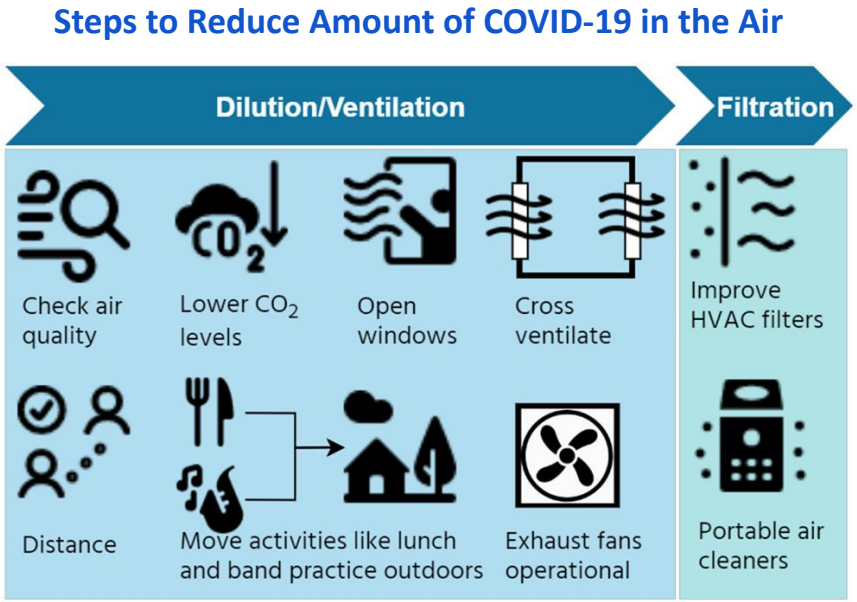
- If there is an HVAC system, ensure it:
  - is in good working order
  - uses the highest level filters it is capable of using, (preferably at least MERV 13)
  - provides 20 to 40% outside air.
  - HVAC should ensure at least six (6) air changes per hour of outdoor air.

- **Policymakers, School boards and trustees must dedicate resources to create safer school environments.**

Sources: 1. https://cleanaircrew.org/schools/; 2. https://www.frontiersin.org/articles/10.3389/fpubh.2022.805780/full;
3. https://www.bostonpublicschools.org/Page/8810; 4. https://www.epa.gov/coronavirus/air-cleaners-hvac-filters-and-coronavirus-covid-19
5. https://www.centerforhealthsecurity.org/resources/COVID-19/COVID-19-resources/tips-to-improve-school-vent.html

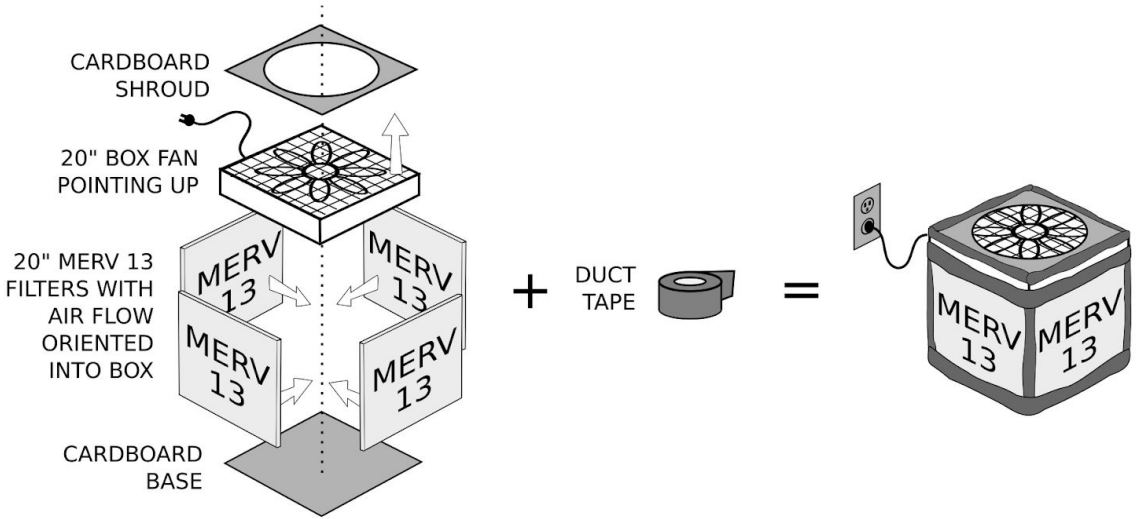
Improving Indoor Air Ventilation and Cleaning Indoor Air Using HEPA Filtration Makes Schools Safer

- Open windows to **improve ventilation** (if weather and outdoor air quality permit). Ideally, open windows on opposite walls or place fans in windows — one bringing air out, and one bringing air in. **Windows should never be relied on as the sole source of dilution.**
- **Monitor air quality** with CO2 monitors when possible, with rooms at full capacity and different climate conditions. CO2 levels should ideally be close to outside air quality (400ppm). **Aim for < 800ppm.**
- **Move lunch and high aerosol generating activities, like choir, band practice, and physical education outdoors.**
- Advocate for and use **government resources** to assess the rate of ventilation to ensure a minimum of 6 (six) air changes per hour of outside air plus HEPA-filtered air. Ensure HVAC systems operate continuously. **Industrial hygienists** may be useful in helping implement these policies.



Sources: https://cleanaircrew.org/schools/; https://www.frontiersin.org/articles/10.3389/fpubh.2022.805780/full; https://www.bostonpublicschools.org/Page/8810; https://www.centerforhealthsecurity.org/resources/COVID-19/COVID-19-resources/tips-to-improve-school-vent.html

DIY Air Cleaners Like the Corsi-Rosenthal Box Can be Used Where HVAC Improvements and Commercial Portable HEPA Filters are Unavailable



Corsi-Rosenthal Boxes are low-cost DIY Air Purifiers, which are effective and can be made by students, parents, or staff. Air cleaners — consumer and DIY — can also be used in homes to limit the spread of COVID. Air cleaning is especially critical for multi-generational households and those with immunocompromised and vulnerable members.

Source and Detailed Instructions on how to build Corsi Rosenthal Box :https://cleanaircrew.org/box-fan-filters/
Preprints on Corsi-Rosenthal Boxes efficacy: https://www.medrxiv.org/content/10.1101/2022.01.09.22268972v1;

Layers of Protection:

N95 Grade Masks, Especially When Universally Used, Limit Transmission

High-quality Masks Reduce COVID-19 Spread

- Lab testing shows well-fitting masks can reduce exposure to potentially infectious aerosols by up to 95%.
- Universal use of N95/FFP2 grade masks provides the most protection.
- N95/FFP2, KN95, and KF94 respirators offer the highest protection, and should be used in all school settings. If N95 grade masks are not available, well-adjusted surgical masks are marginally better than cloth masks. Cloth masks offer very little to no protection.
- Many great options exist for KN95 and KF94 masks for children.

Recommendations for Mask Fitting

(Adapted from El Pais article linked below.)

N95/FFP2 masks offer the best protection, followed by KN95/KF94 masks

Sources: 1. https://www.pnas.org/doi/10.1073/pnas.2110117118#fig02 2. https://www.pnas.org/content/pnas/118/49/e2110117118.full.pdf;
3. https://www.washingtonpost.com/health/2022/01/20/n95-mask-effectiveness/ ;
4. https://elpais.com/sociedad/2022-02-12/esto-es-lo-que-tardarias-en-contagiarte-de-covid-con-cada-tipo-de-mascarilla.html

Masks Can be Safely Worn by Children 2 Years and Older

- Face masks reduce the spread of SARS-CoV-2 and other respiratory infections within schools and other crowded public settings.
- When the risk of transmission is high, **high-quality, well-fitting, and comfortable face masks should be worn b everyone 2 years of age and older in indoor public setting**
- Resources for finding high-quality masks designed specifically for kids are available:
  - Projectn95.org
  - Masks for kids
  - Kid's Mask Summary
- Finding a good mask that properly fits unique small faces may require some trial and error.
- Accessories like self-adhesive nose bridge strips can help secure a good fit and prevent eyeglass fogging if needed.

How to properly wear a face mask
Check that face masks:
1. Cover your nose and mouth
2. Are secure under the chin
3. Fit snugly to avoid gaps on the sides
children's health

Masks Reduce COVID-19 Spread

- As indicated in the summary table to the right, real-world studies using various designs show masks reduce COVID-19 transmission across many settings.
- A large randomized controlled trial (RCT) in Bangladesh showed masks reduced transmission in the community. Specifically, they found surgical masks were more effective than cloth masks, but did not examine higher-quality masks.

JAMA Network

Table. Studies of the Effect of Mask Wearing on SARS-CoV-2 Infection Risk[a]

Source	Location	Population studied	Intervention	Outcome
Hendrix et al	Hair salon in Springfield, Missouri	139 Patrons at a salon with 2 infected and symptomatic stylists	Universal mask wearing in salon (by local ordinance and company policy)	No COVID-19 infections among 67 patrons who were available for follow-up
Payne et al	USS Theodore Roosevelt, Guam	382 US Navy service members	Self-reported mask wearing	Mask wearing reduced risk of infection by 70% (unadjusted odds ratio, 0.30 [95% CI, 0.17-0.52])
Wang Y et al	Households in Beijing, China	124 Households of diagnosed cases comprising 335 people	Self-reported mask wearing by index cases or ≥1 household member prior to index case's diagnosis	Mask wearing reduced risk of secondary infection by 79% (adjusted odds ratio, 0.21 [95% CI, 0.06-0.79])
Doung-ngern et al	Bangkok, Thailand	839 Close contacts of 211 index cases	Self-reported mask wearing by contact at time of high-risk exposure to case	Always having used a mask reduced infection risk by 77% (adjusted odds ratio, 0.23 [95% CI, 0.09-0.60])
Gallaway et al	Arizona	State population	Mandatory mask wearing in public	Temporal association between institution of mask wearing policy and subsequent decline in new diagnoses
Rader et al	US	374 021 Persons who completed web-based surveys	Self-reported mask wearing in grocery stores and in the homes of family or friends	A 10% increase in mask wearing tripled the likelihood of stopping community transmission (adjusted odds ratio, 3.53 [95% CI, 2.03-6.43])
Wang X et al	Boston, Massachusetts	9850 Health care workers (HCWs)	Universal masking of HCWs and patients in the Mass General Brigham health care system	Estimated weekly decline in new diagnoses among HCWs of 3.4% after full implementation of the mask wearing policy
Mitze et al	Jena (Thuringia), Germany	City population aged ≥15 y	Mandatory mask wearing in public spaces (eg, public transport, shops)	Estimated daily decline in new diagnoses of 1.32% after implementation of the mask mandate
Van Dyke et al	Kansas	State population	Mandatory mask wearing in public spaces	Estimated case rate per 100 000 persons decreased by 0.08 in counties with mask mandates but increased by 0.11 in those without
Lyu and Wehby	15 US states and Washington, DC	State populations	Mandatory mask wearing in public	Estimated overall initial daily decline in new diagnoses of 0.9% grew to 2.0% at 21 days following mandates
Karaivanov et al	Canada	Country population	Mandatory mask wearing indoors	Estimated weekly 25%-40% decline in new diagnoses following mask mandates

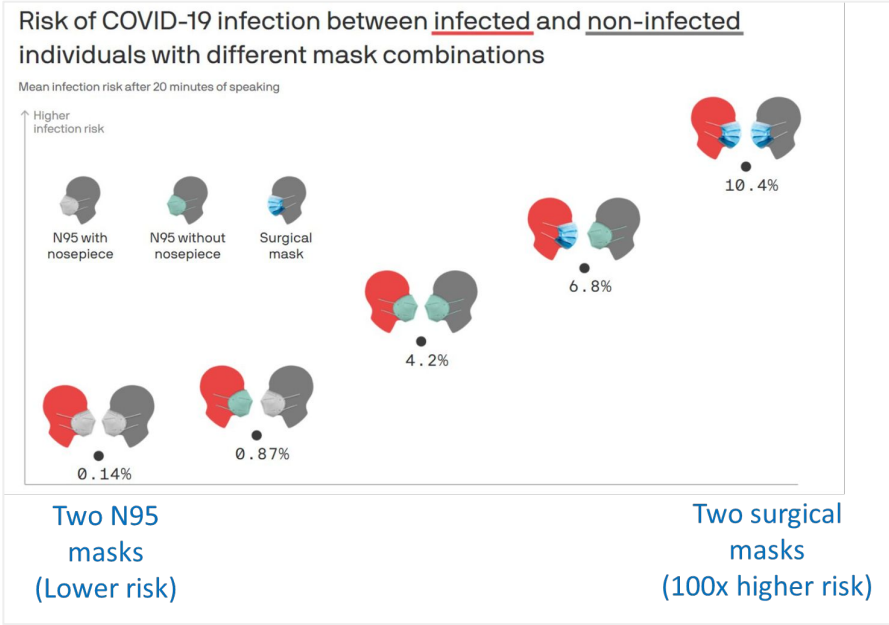
[a] See the Supplement for the complete table.

Sources: 1.: https://www.science.org/doi/10.1126/science.abi9069; https://jamanetwork.com/journals/jama/fullarticle/2776536;
2. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2788457; 3. https://www.washingtonpost.com/health/2022/01/20/n95-mask-effectiveness/;
4. https://www.science.org/doi/10.1126/science.abi9069; 5. https://www.npr.org/sections/health-shots/2022/01/15/1073273768/n95-mask-respirator-cdc

Universal Masking Reduces the Amount of virus in the Air

Concern: "One-way" masking has been promoted by the CDC and Biden Administration, requiring only those who are vulnerable or concerned about COVID-19 to wear masks.

- High-quality, well-fitting masks protect both the person wearing them and those around them. Together, the protection is much stronger.
- With more contagious variants and the removal of COVID-19 protections, one-way masking has at times been insufficient to protect even diligent adult mask-wearers, let alone children.
- **Universal masking avoids stigmatizing children** with high-risk conditions or those trying to protect their family or other household members.



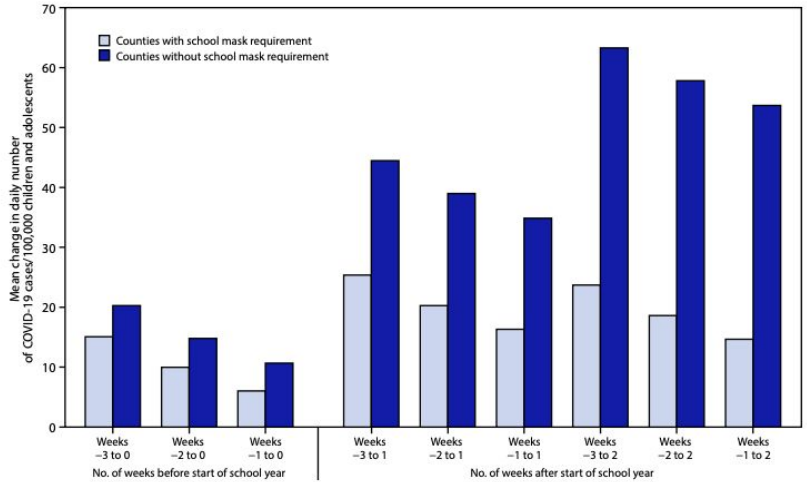
Sources: 1. https://www.pnas.org/content/pnas/118/49/e2110117118.full.pdf;
2. https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-019-1271-3;
3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6135094/;
4. https://www.cdc.gov/mmwr/volumes/71/wr/mm7106e1.htm

Via PNAS article by @BagheriMos
(Graphic: Axiso; reminded by @PeteUK7)

Mask Mandates Have Been Associated With Decreased Rates of COVID-19

- Multiple studies comparing cases before and after states implemented mandates show that **masks mandates work.**
- A CDC study found that increases in pediatric COVID-19 case rates during the start of the 2021–22 school year were smaller in U.S. counties with school mask requirements than in those without school mask requirements.
- Data-driven mask mandates can be turned on and off depending on COVID-19 positivity rates and other factors.
- Data-driven mask mandates **are especially important in communities of color, rural communities, and outside the United States** where children live in multigenerational and densely populated households. Structural racism is a key determinant of health.

FIGURE. Mean county-level change in daily number of COVID-19 cases per 100,000 children and adolescents aged <18 years in counties (N = 520) with and without school mask requirements* before and after the start of the 2021–22 school year — United States, July 1–September 4, 2021



* Among 520 counties, 198 (38%) had a school mask requirement and 322 (62%) did not have a school mask requirement.

Sources: 1. https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00818; 2. https://www.cdc.gov/mmwr/volumes/70/wr/mm7010e3.htm;
3. https://www.vox.com/science-and-health/21546014/mask-mandates-coronavirus-covid-19; 4. https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7039e3-H.pdf;
5. https://www.vumc.org/health-policy/news-events/tennessee-areas-without-mask-requirements-have-higher-death-toll-capita;
6. https://missouriindependent.com/2021/12/01/missouri-health-department-found-mask-mandates-work-but-didnt-make-findings-public/;
7. https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7039e3-H.pdf

Layers of Protection:
Testing Helps Keep Schools Safer and Informs Decision Making

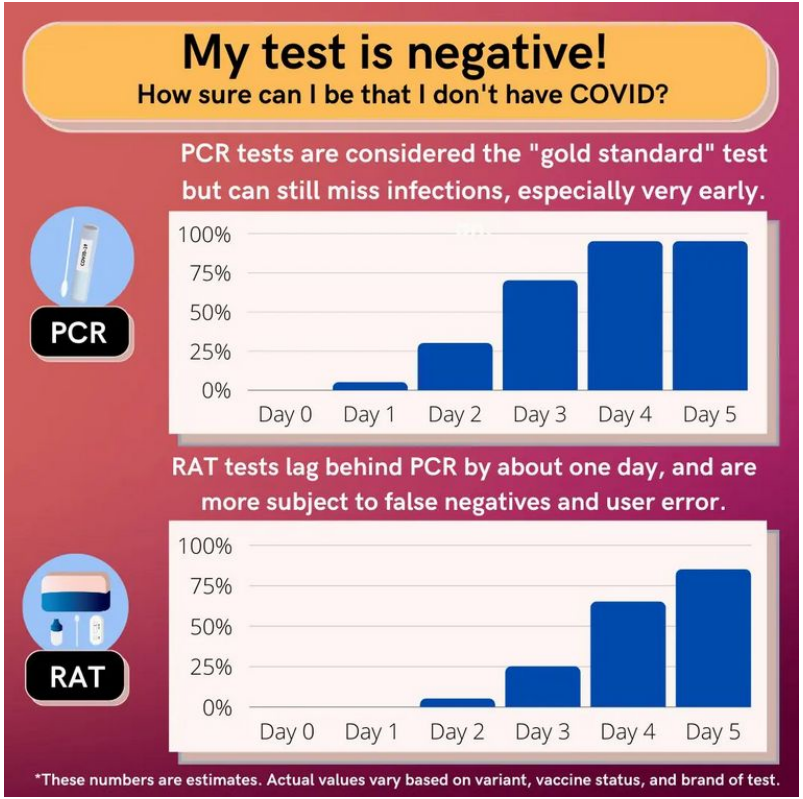
Two Types of Tests are Available for Detecting the Virus: Used in Combination They are Both Valuable Tools

1. **PCR/LAMP/NAAT** tests check for the presence of SARS-CoV-2 genetic material. These tests:

- Are highly sensitive: great diagnostic accuracy, especially a few days after exposure
- Are generally available at clinics
- Sometimes take many days to get results
- PCR tests are the “gold standard” and thus **should be fast, free and accessible to all.**

2. **Rapid antigen tests (RATs)** recognize one or more specific proteins that are part of the virus:

- Home test kits give results in a few minutes
- Offer testing outside healthcare settings
- Are useful for determining when to leave isolation: 2 negative tests on 2 consecutive days generally means a person is no longer contagious (unless person has taken Paxlovid).

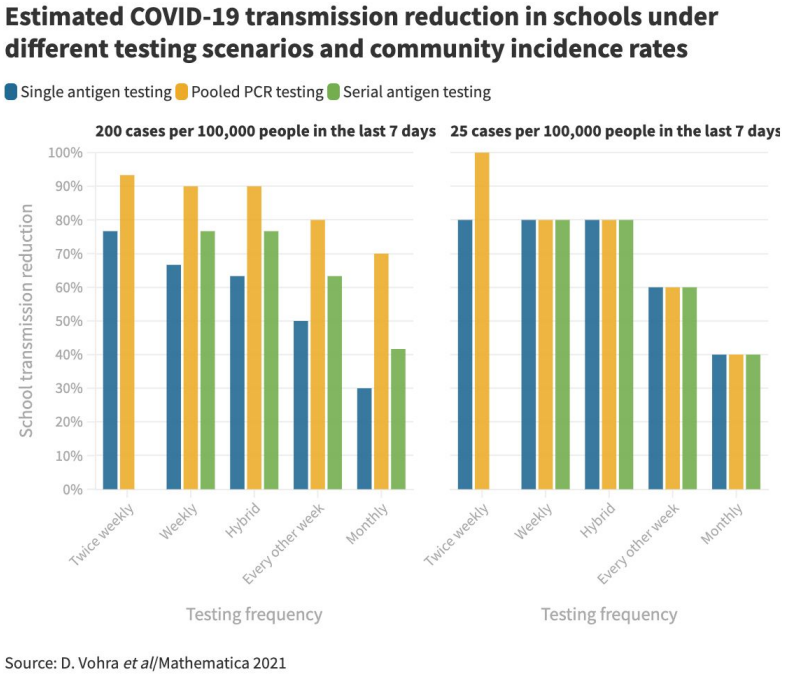


Sources:1. https://whn.global/guidelines/index.php/Testing ; 2. https://peoplescdc.org/2022/07/01/testing-faqs/

Schools Can Use PCR and/or Rapid Testing in Multiple Ways to Help Keep Students and Staff in School Safely

Regular PCR- or RAT-based surveillance

- Through regular testing, schools can find cases before they start to spread.
- At least **Twice weekly PCR tests or** daily rapid tests are the most effective surveillance protocols
- Surveillance prevents outbreaks and demonstrates to the school community that other layers of protection are working, improving buy-in for masking, eating outdoors, and grouped learning.
- Pooled PCR tests sample from a whole classroom or grade at once and can be more efficient when case levels are low or moderate.
- School testing increases access to testing for members of lower-income households, who may not be able to afford at-home test kits.

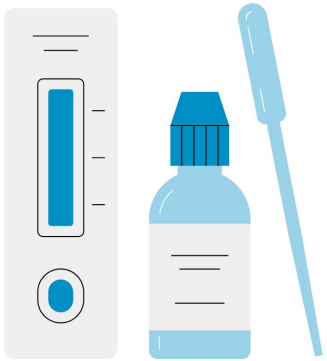


Sources: 1. https://www.cdc.gov/mmwr/volumes/71/wr/mm7108a3.htm; 2. https://jamanetwork.com/journals/jamapediatrics/fullarticle/2791525;
3. https://www.uillinois.edu/shield; https://whn.global/guidelines/index.php/Schools#Screening_Testing;
4. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2789005

In Resource-Restricted Spaces, Where Daily Surveillance Cannot be Used, Alternative Testing Strategies Can Still Keep Schools Safer

1. Testing symptomatic students & staff

- A PCR is the best choice to diagnose students & staff once they develop symptoms because it can potentially detect a positive case before the person is infectious.
- Negative tests - PCR or RAT - do not reliably indicate that a person is COVID-free, especially early on in infection. All negative tests should be followed by daily repeat testing for at least 2-3 days.
- Students & staff should always wear N95 grade masks regardless of test status or symptoms.



2. Test to stay

- With test to stay policies, students & staff exposed to COVID are allowed to remain at school with daily PCR or rapid tests for 5-7 days after last exposure. PCR tests are preferred, when available.
- Staff & students should also wear N95 grade masks at all times to limit spread.

Sources: 1. https://www.cdc.gov/mmwr/volumes/71/wr/mm7108a3.htm; 2. https://jamanetwork.com/journals/jamapediatrics/fullarticle/2791525; 3. https://www.uillinois.edu/shield

Testing is Useful for Developing Return to School Protocols

1. **Rapid Tests to return to school after infection**
   - Since more than half of individuals are still infectious after day 5 of infection, testing should be used to inform a safe return to school after a period of isolation.
   - A recent study of Omicron found that half of infected individuals were shedding live virus at day 8 — and almost 25% still had live virus at day 10.
   - Negative RATs on 2 consecutive days indicate that an individual is no longer infectious and can return to school.
   - This is the protocol used by the White House, even if the CDC recommendations are weaker.

2. **PCR Tests to return to school after breaks**
   - For instance, testing in Los Angeles Public Schools before returning after winter break found >65,000 positive students and staff, who could have otherwise brought COVID-19 into schools. Again, PCR tests are preferable.

Sources: 1. https://www.cdc.gov/media/releases/2021/s1217-Test-To-Stay.html;
2. https://publications.aap.org/pediatrics/article/doi/10.1542/peds.2021-055727/184750/A-Test-to-Stay-Modified-Quarantine-Program-for;
3. https://www.medrxiv.org/content/10.1101/2021.01.27.21250388v1.full; https://www.cbsnews.com/news/los-angeles-schools-covid-students-teachers-employees/
4. https://www.sciencenews.org/article/covid-testing-school-works-coronavirus-pandemic-reopening; https://www.cdc.gov/mmwr/volumes/70/wr/mm7035e2.htm

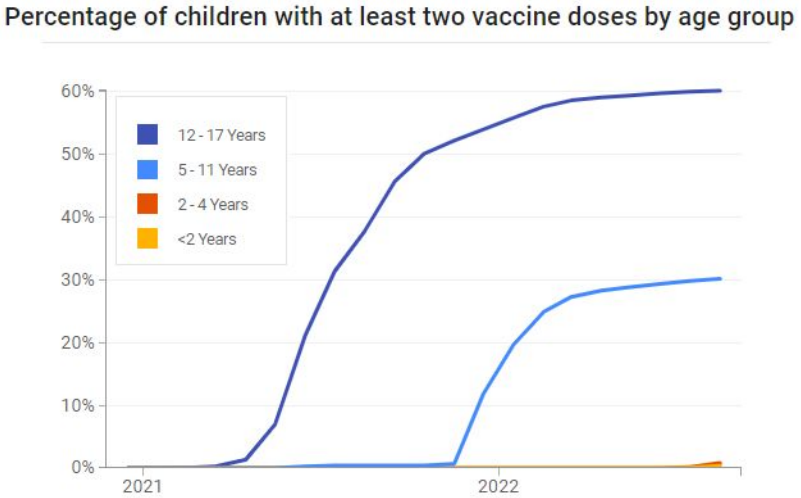
Layers of Protection:

Vaccines Help Protect Against Severe Disease and Death, but Too Few Children are Vaccinated.

Right Now, Child Vaccination Rates are Low

Vaccination helps prevent serious acute infections in children. Vaccination rates must be improved.

- As of August 2022, approximately 60% of students 12-17 years old, 30% of students 5-11 years old, and less than 1% of children under 5 years old have received at least 2 vaccine doses.
- Racial and ethnic minority students are less likely to have had access to vaccines.
- The choice to be vaccinated is often not up to students.
- Risk reduction is optimal when all students, staff, and teachers have received both initial vaccination and booster doses.



Percent of People Receiving COVID-19 Vaccine by Age and Date Administered, United States

December 14, 2020 – August 10, 2022

	<2 yrs	2-4 yrs	5-11 yrs	12-17 yrs
At Least One Dose	3.1%	5.2%	37.6%	70.4%
Fully Vaccinated	0.4%	0.9%	30.2%	60.2%

Source: https://covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends

Note: fully vaccinated here means the original series only; the proportion of people with boosters is even lower.

Racial and Ethnic Minority Students are Less Likely to Have Had Access to Vaccines

- In many states, vaccination rates amongst Black and Latinx children are very low.
- The history of Medical Racism contributes to low vaccine uptake.
- Throughout the pandemic, Vaccines and Boosters have been less readily available in low-income and BIPOC communities.
- These inequities have been exacerbated by policy decisions: specifically Congressional inaction on COVID-19.

Table 2

Percent of Children Under 12 Who Have Received a COVID-19 Vaccine Dose by Race/Ethnicity, July 11, 2022

Click on the buttons below to see data for the different age groups:

Children Ages 5-11 | Other Children

State	White	Black	Hispanic	Asian	AIAN	NHOPI	BIPOC
California	38%	25%	23%	59%	NA	NA	NA
Connecticut (ages 5-9)	76%	32%	33%	81%	NA	NA	NA
DC	89%	35%	60%	54%	NA	NA	NA
Maine	43%	62%	40%	>99%	76%	NA	NA
Michigan	30%	19%	23%	87%	38%	NA	NA
Minnesota	38%	30%	32%	67%	37%	NA	NA
North Carolina	21%	20%	21%	52%	10%	NA	NA
Oregon	40%	41%	24%	72%	50%	90%	NA
Vermont	56%	NA	NA	NA	NA	NA	64%

NOTE: Data may not be comparable across states due to differences in reporting periods, age group categories, and racial/ethnic classifications. States vary in whether they include or exclude Hispanic people from their racial groups and in their racial classifications. In Connecticut, Michigan, Minnesota, DC, and Wisconsin the Asian group includes Native Hawaiian and Other Pacific Islander children. *NA: Indicates data are not available or not reported due to data limitations. Total population data used to calculate rates is matched to each state's racial classification approach. Rates may not match those reported on state websites due to differences in the source for total population data. Rates exceeding 100% are likely due to the approximate nature of the total population estimates used to calculate rates and are reported here as >99%.

SOURCE: Vaccination data based on KFF analysis of publicly available data on state websites; total population data used to calculate rates based on KFF analysis of 2019 American Community Survey data. • PNG

KFF

Sources:

1. https://www.kff.org/coronavirus-covid-19/issue-brief/latest-data-on-covid-19-vaccinations-by-race-ethnicity/
2. https://www.verywellhealth.com/vaccine-access-versus-hesitancy-bipoc-communities-5121209
3. https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-in-covid-19-impacts-and-vaccinations-for-children/

Strategies for Safer Schools:

Protecting Mental Health, Addressing Learning Loss, and Reimagining School as a Space for Discovery and Healing

Many Factors Contributed to Mental Health Stressors Among Youth During the Pandemic

- Increased social isolation
- Loss of access to mental health care and social services
- Increased rates of poverty, food insecurity, and homelessness
- Deprioritization of disabled Americans' lives and safety
- Infections with COVID-19 and long COVID
- Losing loved ones and caregivers to COVID
- Disproportionate police violence against Black Americans
- COVID-related violence against Asian Americans
- Gun violence
- Growing concerns about climate change
- Attacks on LGBTQI youth
- Attacks on reproductive rights

> "The future wellbeing of our country depends on how we support and invest in the next generation."
>
> **- U.S. Surgeon General Vivek Murthy**

Sources: 1. https://doi.org/10.15585/mmwr.mm7024e1 2. https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf https://www.hhs.gov/about/news/2021/12/07/us-surgeon-general-issues-advisory-on-youth-mental-health-crisis-further-exposed-by-covid-19-pandemic.html 3.https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/

We Have the Tools to Support Students' Mental Health, and We Can Support Our In-School Educators to Use Those Tools

- The "**healing centered schools**" model, with an assets analysis, centers the whole child by supporting mental and physical health in order to support teaching and learning. This model also brings in the health and well-being of families, educators, and school leaders[4,5,6] with a holistic analysis of the school community's needs.

- **Socio-emotional learning (SEL)** curriculum are critical for helping children identify their emotions and coping mechanisms when they are in stressed environments. Programs like CASEL and LiberatED by Dr. Dena Simmons are grounded on equity and anti-racist principles.

Healing Centered Schools: [4]Ieva, K. P., Beasley, J., & Steen, S. (2021). Equipping school counselors for antiracist healing centered groups: a critical examination of preparation, connected curricula, professional practice and oversight. *Teaching and Supervision in Counseling*, *3*(2), 7., [5]Kimner, H. (2021). Healing-Centered Community Schools: A Key Investment for COVID-19 Recovery. *Policy Analysis for California Education, PACE*, [6]Pavelka, S. (2013). Practices and policies for implementing restorative justice within schools. *The prevention researcher*, *20*(1), 15-18.

First: Masks Do Not Interfere With Learning

- There is no robust empirical evidence showing that masks interfere with student learning, or cognitive development.
- Visually impaired children develop speech and language skills at the same rate as their peers. In fact, when one sense is taken away, the others may be heightened.
- Based on a review of available literature, The South Carolina Department of Health concluded “No data regarding the impact of mask wearing on children’s academic development or performance was identified during a review”.
- A recent review from August 2022, demonstrated that masks were effective at diminishing COVID transmission, and similarly did not negatively impact learning, or cognition

> “Kids are able to determine the emotion that someone is likely to feel even when they’re wearing a face mask.”
>
> - Dr. Ashley Ruba, Developmental Psychologist

Sources: 1. https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Do-face-masks-interfere-with-language-development.aspx
2. https://scdhec.gov/sites/default/files/media/document/Science-on-Mask-Use-in-K-12-Schools_8.20.21_FINAL.pdf;
3. https://www.publichealthontario.ca/-/media/documents/ncov/covid-wwksf/2021/08/wwksf-wearing-masks-children.pdf?sc_lang=en.
4. https://newrepublic.com/article/165306/face-masks-dont-harm-kids-development; 5. https://www.cdc.gov/mmwr/volumes/70/wr/mm7008e4.htm
6. https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Mask-Mythbusters.aspx

Masks Do Not Interfere With Learning, continued

- The American Association of Pediatrics affirms that masks are important tools to preventing COVID-19 infection and to keeping children and school staff safe.
- **The AAP reports that masks do not interfere with speech and language acquisition** "we know even visually impaired children develop speech and language at the same rate as their peers."
- However, the absence of consistent efforts to control the pandemic has led to learning loss. Repeated and uncontrolled severe and chronic illness disrupts learning.

"Masks are important to help reduce the spread of COVID-19. During the pandemic, schools with mask policies had less spread of COVID in school."

- American Association of Pediatrics (AAP)

Sources: 1. https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Do-face-masks-interfere-with-language-development.aspx
2. https://scdhec.gov/sites/default/files/media/document/Science-on-Mask-Use-in-K-12-Schools_8.20.21_FINAL.pdf;
3. https://www.publichealthontario.ca/-/media/documents/ncov/covid-wwksf/2021/08/wwksf-wearing-masks-children.pdf?sc_lang=en.
4. https://newrepublic.com/article/165306/face-masks-dont-harm-kids-development; 5. https://www.cdc.gov/mmwr/volumes/70/wr/mm7008e4.htm
6. https://www.healthychildren.org/English/health-issues/conditions/COVID-19/Pages/Mask-Mythbusters.aspx

Disabled and Immunocompromised Students & Staff Deserve Safe Schools

- Disability law mandates “reasonable accommodations” to make schools and workplaces accessible to disabled students and workers.
- **Universal mask mandates must be considered reasonable accommodations for disabled and immunocompromised people.**
- In Iowa, the U.S. Court of Appeals for the Eighth Circuit ruled that school mask mandates constitute a reasonable accommodation and must be enacted in schools with disabled students. In Virginia, a federal judge ruled that disabled students named in the lawsuit can seek reasonable accommodations in the form of a mask mandate.
- Individualized Education Plan (IEPs) could be used to strengthen protections in schools. IEPs already include specific mandates related to staffing, setting, academic and physical requirements based on children’s physical, emotional and intellectual needs.

Source: Minnesota Department of Human Rights

Sources: 1. https://www.eeoc.gov/wysk/what-you-should-know-about-covid-19-and-ada-rehabilitation-act-and-other-eeo-laws
2. https://www.aclu-ia.org/en/press-releases/federal-appeals-court-decision-ensures-iowa-schools-can-require-masking-protect
3.. https://www.npr.org/2022/03/25/1088849364/virginia-mask-mandate-schools 4. https://www2.ed.gov/about/offices/list/ocr/504faq.html
5. https://blog.petrieflom.law.harvard.edu/2022/03/08/masks-workplace-ada-reasonable-accomodation/

Social Workers and School Counselors can be Restorative Justice Practitioners

- A shift from zero-tolerance to **restorative justice practices** allows students to build community, repair relationships, and have a space to discuss their feelings about events at school that have caused them harm[1,2,3].
    - Youth can also be circlekeepers with support from practitioners.

- **More counselors and social workers** in our schools can provide mental health support and career support for our students. The presence of social workers during the pandemic has been critical in supporting students with their needs from emotional support, learning strategies, food and housing insecurity, and support for their families[7,8,9,10].

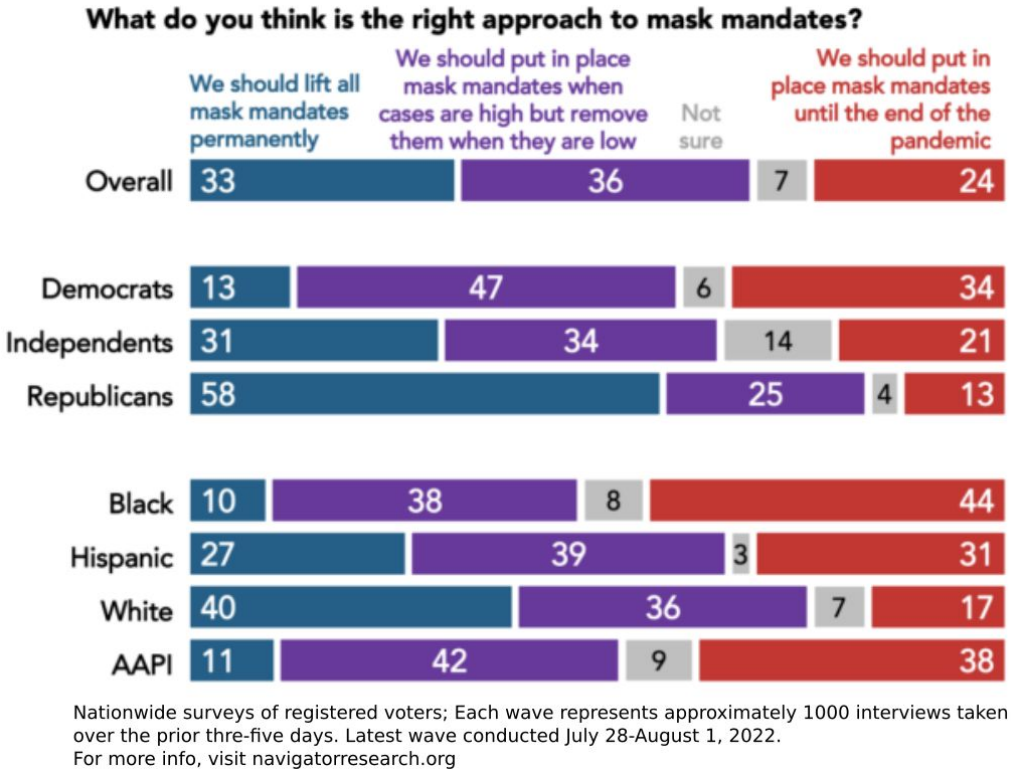
Address and discuss the needs of the school community
Build healthy relationships between educators and students
Restorative Practices
Resolve conflict, hold individuals and groups accountable
Reduce, prevent, and improve harmful behavior
Repair harm and restore positive relationships

Restorative Justice: [1]Hopkins, B. (2002). Restorative justice in schools. *Support for Learning*, *17*(3), 144-149., [2]Pavelka, S. (2013). Practices and policies for implementing restorative justice within schools. *The prevention researcher*, *20*(1), 15-18. [3]Teasley, M. L. (2014). Shifting from zero tolerance to restorative justice in schools. *Children & Schools*, *36*(3), 131-133.
Recovery. *Policy Analysis for California Education, PACE*, [6]Pavelka, S. (2013). Practices and policies for implementing restorative justice within schools. *The prevention researcher*, *20*(1), 15-18.
Social Workers + COVID19: [7]Alvarez, M. E., Bye, L., Bryant, R., & Mumm, A. M. (2013). School social workers and educational outcomes. *Children & Schools*, *35*(4), 235-243., [8]Cameron, M. (2006). Managing school discipline and implications for school social workers: A review of the literature. *Children & Schools*, *28*(4), 219-227., [9]Kelly, M. S., Astor, R. A., Benbenishty, R., Capp, G., & Watson, K. R. (2020). Opening schools safely in the COVID-19 era: School social workers' experiences and recommendations technical report. *UCLA Luskin School of Public Affairs, Department of Social Work.*, [10]Zetlin, A. G., Weinberg, L. A., & Kimm, C. (2005). Helping social workers address the educational needs of foster children. *Child Abuse & Neglect*, *29*(7), 811-823.

The U.S. Public Supports Protections in Schools

The U.S. Public is Willing to Mask When Cases are High

As of August 1, 2022,
60% of Americans support
mask mandates when cases are high.


What do you think is the right approach to mask mandates?
We should lift all mask mandates permanently
We should put in place mask mandates when cases are high but remove them when they are low
Not sure
We should put in place mask mandates until the end of the pandemic
Overall 33 36 7 24
Democrats 13 47 6 34
Independents 31 34 14 21
Republicans 58 25 4 13
Black 10 38 8 44
Hispanic 27 39 3 31
White 40 36 7 17
AAPI 11 42 9 38
Nationwide surveys of registered voters; Each wave represents approximately 1000 interviews taken over the prior thre-five days. Latest wave conducted July 28-August 1, 2022.
For more info, visit navigatorresearch.org

Source: https://navigatorresearch.org/americans-are-split-on-behavior-during-this-stage-of-the-pandemic/

The Public is Willing to Mask In Surges

In a recent (July 2022) Ipsos poll, 36% of respondents reported wearing a mask outside the home sometimes or all the time. However, 70% of these same respondents said they would be likely to wear a mask "if COVID-19 cases were to increase again in your area." **With most of the country in a surge, masked by the "community levels" map this raises questions about how well leaders are informing the public of risks.**

71% said they do not strongly oppose "employer requiring all employees and customers/guests to be masked at your workplace." 48% of those polled said they support these measures.

67% of respondents do not strongly oppose, and 45% support "state or local government requiring masks to be worn in all public places."

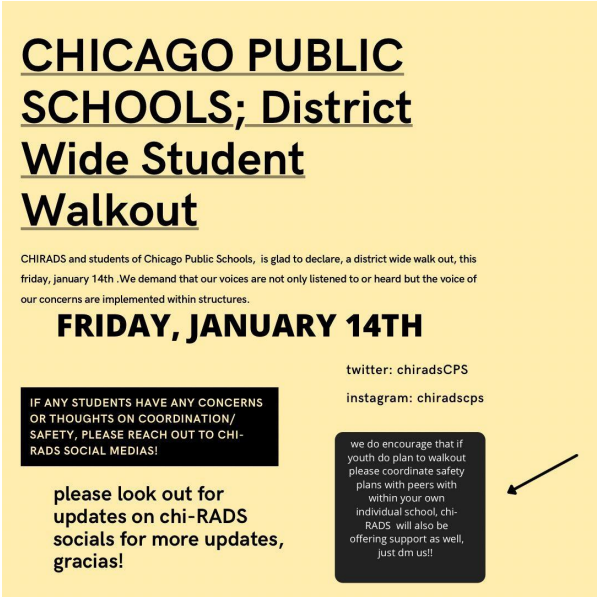
There is vocal, well-funded opposition to mandates (especially in schools), but by and large, the public is willing to mask up in times of surges, and we look to leaders to use mandates to signal the urgent need to protect ourselves and others.

Further, masking in order to protect those within our communities at high risk for severe COVID or death, including those who are immunocompromised or disabled, is a standard that all organizations should uphold.

Organizing and Centering Youth Voices is the Key to Safer Schools

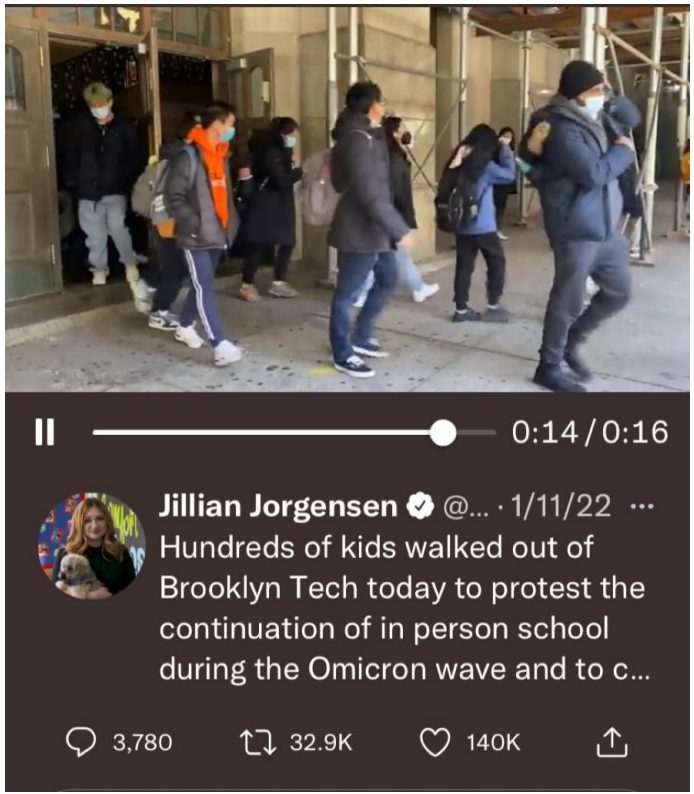
When Mask Mandates Were Dropped in Early 2022, Students Organized Walkouts Across the US Demanding Safer Learning Conditions

- During last winter's COVID-19 surge, students in Chicago and in NYC held a walkout to demand various layers of protection, including remote learning options, higher quality masks, and expanded testing.
- In CPS, the student walkout coincided with negotiations between the Chicago Teachers Union and the city, demonstrating the importance of solidarity amongst teachers *and* students.
- Together, these efforts led the city to expand testing and access to PPE, and to improve their monitoring of cases in schools.


CHICAGO PUBLIC SCHOOLS; District Wide Student Walkout
CHIRADS and students of Chicago Public Schools, is glad to declare, a district wide walk out, this friday, january 14th .We demand that our voices are not only listened to or heard but the voice of our concerns are implemented within structures.
FRIDAY, JANUARY 14TH
twitter: chiradsCPS
instagram: chiradscps
IF ANY STUDENTS HAVE ANY CONCERNS OR THOUGHTS ON COORDINATION/ SAFETY, PLEASE REACH OUT TO CHI-RADS SOCIAL MEDIAS!
please look out for updates on chi-RADS socials for more updates, gracias!
we do encourage that if youth do plan to walkout please coordinate safety plans with peers with within your own individual school, chi-RADS will also be offering support as well, just dm us!!

Parent and Caregiver Groups and Teacher Unions from San Diego, to New York, to Boston Have Secured Important Protections for Children

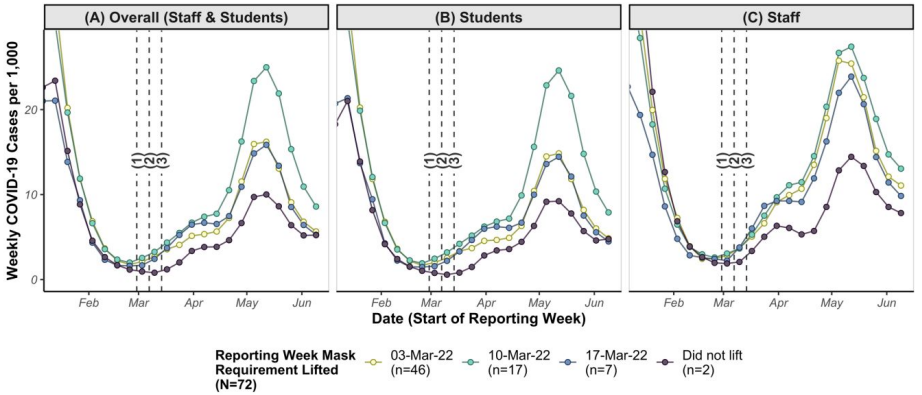
- Organizing by BPS Families for Covid Safety (FamCOSa) was critical in Boston Public Schools maintaining masks until the end of the 2021-2022 School Year.
- Organizing by San Diego led to mask mandate renewal in San Diego Unified School District.
- In Chicago, students and teachers were able to organize for greater access to PPE and expanded testing for their district.
- In NYC students met with the Chancellor and pushed for a remote option, now NYC Public Schools will start their schools without walls. A remote high school option for students.


0:14 / 0:16
Jillian Jorgensen @... · 1/11/22
Hundreds of kids walked out of Brooklyn Tech today to protest the continuation of in person school during the Omicron wave and to c...
3,780
32.9K
140K

Layers of Protection Work in School Settings

- Schools which kept Universal Masking in Place, such as Boston Public Schools, saw lower case rates, less illness, and fewer absences and disruptions to learning.
- Schools like Abrome ED in Texas, used layered protections to prevent COVID-19 spread in their classrooms and community.

Figure 2. *Weekly reported rate of COVID-19 cases (A) overall, (B) among students, and (C) among staff in Boston/Chelsea Public Schools, by week masking requirements were lifted for school districts within the Boston-Cambridge-Newton NECTA division.*[2]



(1) Week of 28-Feb-22: DESE Statewide Mandate lifted (n = 46)
(2) Week of 07-Mar-22 (n = 17)
(3) Week of 14-Mar-22 (n = 7)

Conclusion

Conclusion

- **COVID-19 remains a serious threat** to our students, our school staff, and our communities.
- **Schools are connected to community. Keeping schools safe means keeping community COVID-19 levels low.**
- **Layers of Protection:** ventilation and air cleaning systems, high-quality masks, robust testing coupled with data-driven isolation and quarantine policies, and vaccines keep schools safer. **We must advocate for their increased funding and use.** COVID-19 protections also help reduce incidence of other respiratory diseases. Disabled and immune-compromised or otherwise high risk students and staff have the right to a safe learning and work environment.
- **Reducing COVID-19 spread will improve mental health and mitigate instructional loss.** Students should have access to MH care, enrichment experiences, and any accommodations they need to succeed. We must trust our educators in doing their job and support our learning communities. Students with Long COVID also deserve appropriate accommodations.
- COVID-19 protections are **supported by most Americans** during high transmission.
- We can work together towards a future that combats the pre-existing disparities with which we entered this pandemic. By working together for safer schools and communities, **we can build a new normal that puts the lives of those most vulnerable first.**

Additional Resources

Models for Safer Schools and Organized Parent/Caregiver Groups

- **Abrome Education :** A school in Texas that has used layered protections to keep kids safe for three years! https://twitter.com/AbromeEd/status/1545758673242411009?s=20&t=MRxMYbdG5UrAu_axJ0sVxQ
- **Families for COVID Safety (BPS):** advocacy led to masks being maintained through end of 2021-22 School Year, in turn reducing COVID cases and school absences.

Clean Air & Masks:

- https://cleanaircrew.org/
- Mask Nerd Mask Resources: https://drive.google.com/drive/folders/1eE2BERAvRzs28kG87ft3a27FS9-gHvdC
- https://www.projectn95.org/

School Guidances & Tools:

- AAP Guidance for Schools
- https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2789005
- https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/K-12-Guidance-2021-22-School-Year.aspx
- https://www.cde.ca.gov/ls/fa/sf/iaq.asp

Public and Community Health:

- The People's CDC – Letter Writing Campaign: Demand Safe and Responsible CDC Guidelines from Congress and the White House
- Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy: https://www.ncbi.nlm.nih.gov/books/NBK218215/#ddd00011
- FAQ on aerosols and protecting yourself from COVID-19 https://tinyurl.com/FAQ-aerosols

Acknowledgements

Thank you to the many public health experts, advocates, and grassroots organizations who have helped to edit, review, and distribute the #UrgencyofEquity toolkit. Some are listed below:

Ida Bergstrom, MD
Uché Blackstock, MD
Oni Blackstock, MD
Antonio Buehler
Virginia Buysse, PhD
Megan Carmilani
Esther Choo, MD
Tiffany Green, PhD
Justin Feldman, PhD, MPH
Lara Jirmanus, MD, MPH
Jon Levy, PhD
Christine Keeves, MPH
Feras Namouz
Kimberly Prather, PhD
Maria Pyra, PhD
Rodrigo Quiroga, PhD
Sonali Rajan, EdD, MS
Kaliris Salas-Ramirez, PhD
Dawy Rkasnuam
Mary Jirmanus Saba
Rachel Silverman, PhD
Zoey Thill, MD, MPP, MPH
Kristin Urquiza

People's CDC
Marked By COVID
Massachusetts Coalition for Health Equity
The HUUB
Long COVID Families
UFT-MORE
Indiana Association of School Nurses
TransLatin@ Coalition Chicago Chapter
Take Action Against COVID

If you would like to sign on as an individual or an organization, please use this form: **join.urgencyofequity.org**